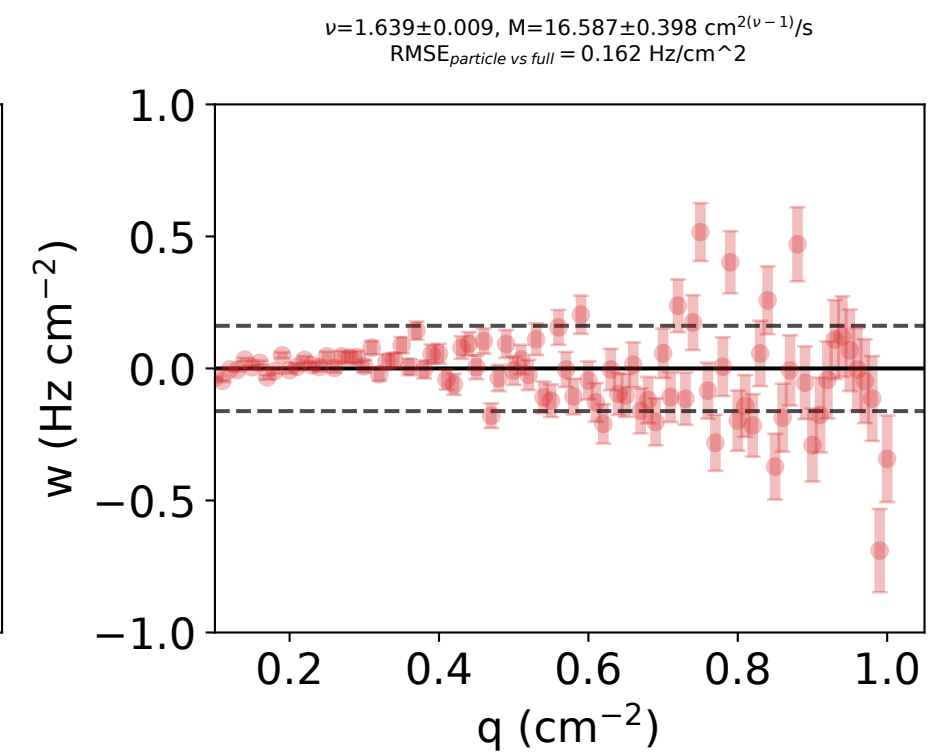
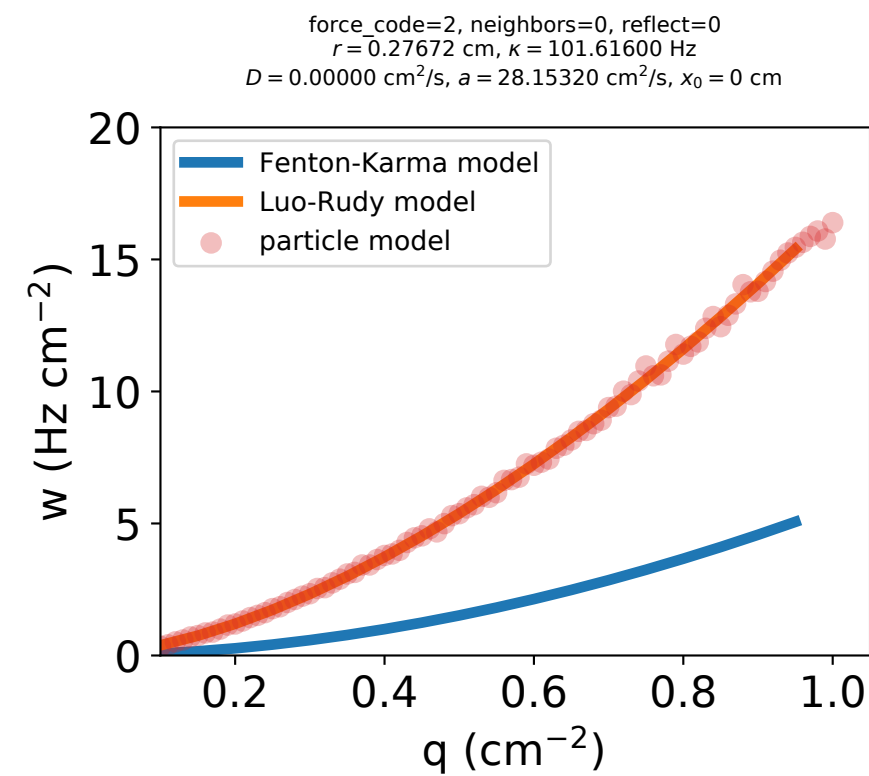
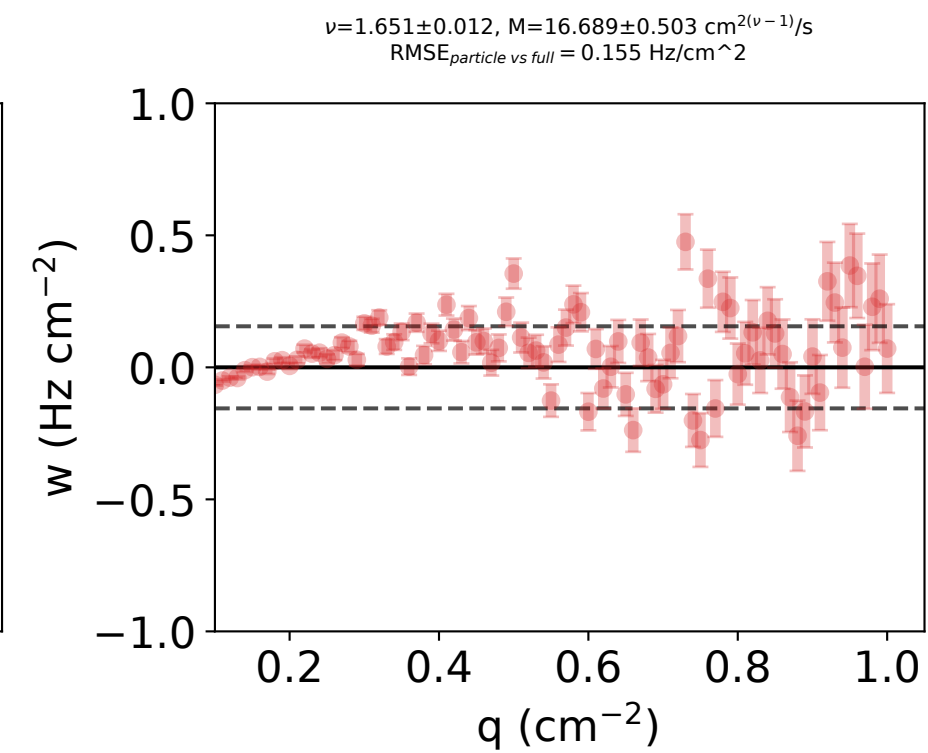
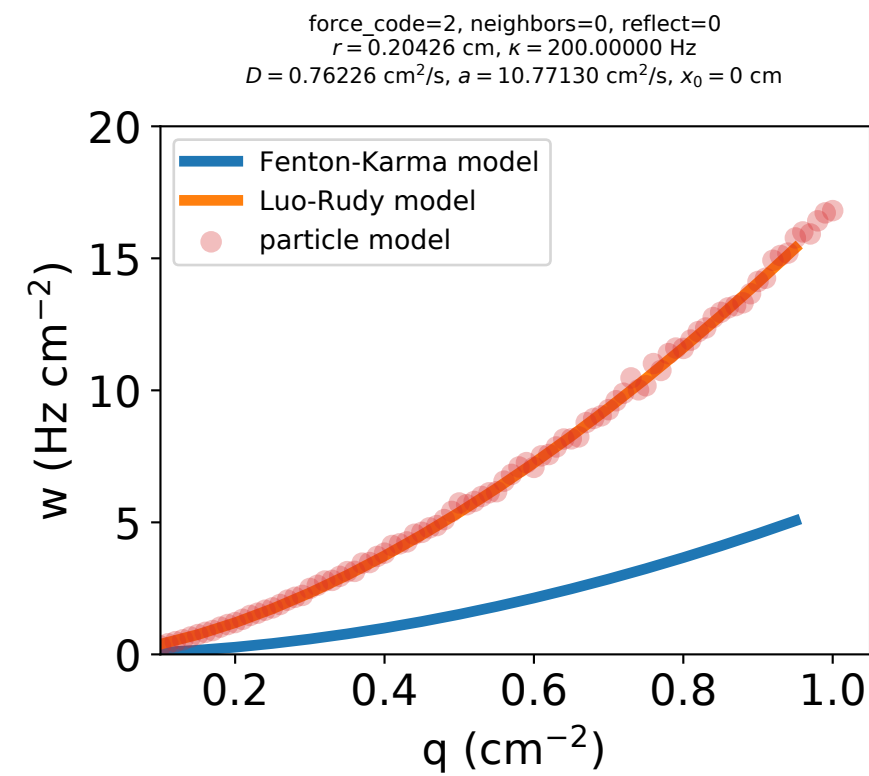
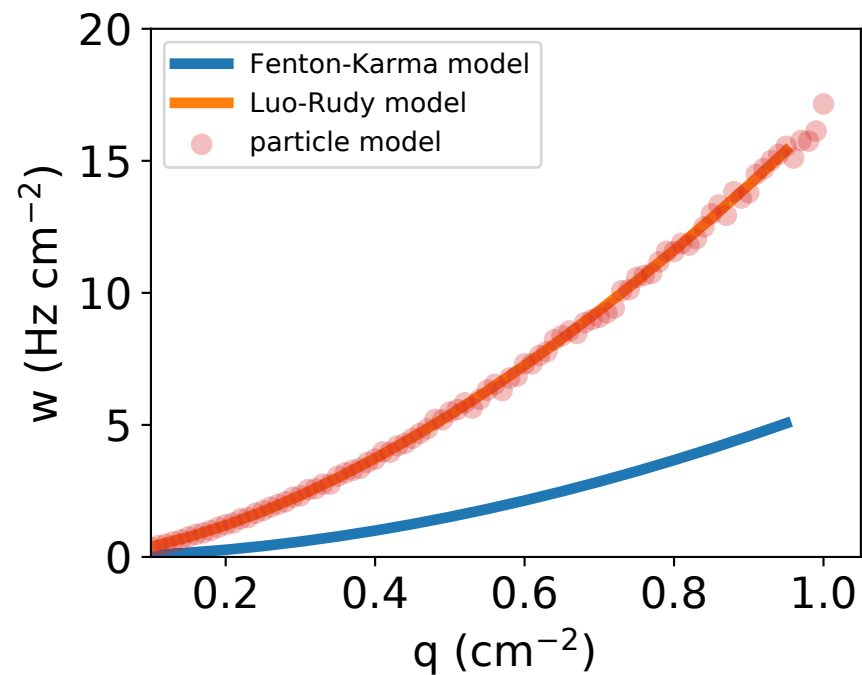


(left column) the mean annihilation rate, w , versus the particle number density, q , for (blue) the Fenton-Karma model, (orange) the Luo-Rudy model, and (red) the particle model. The parameters of the particle models were selected as the critical points found in the (r, a) plane with D and κ fixed.

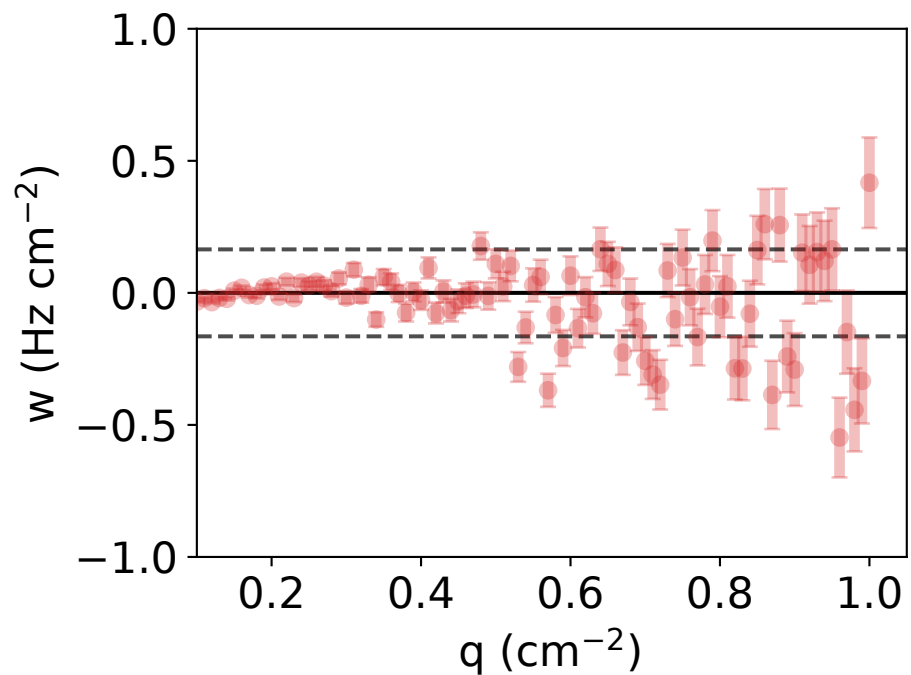
(right column) the disagreement of the mean annihilation rate of the particle model with that of the full model. Error bars represent the 95% confidence intervals for the particle model, supposing there is zero uncertainty from the full model.



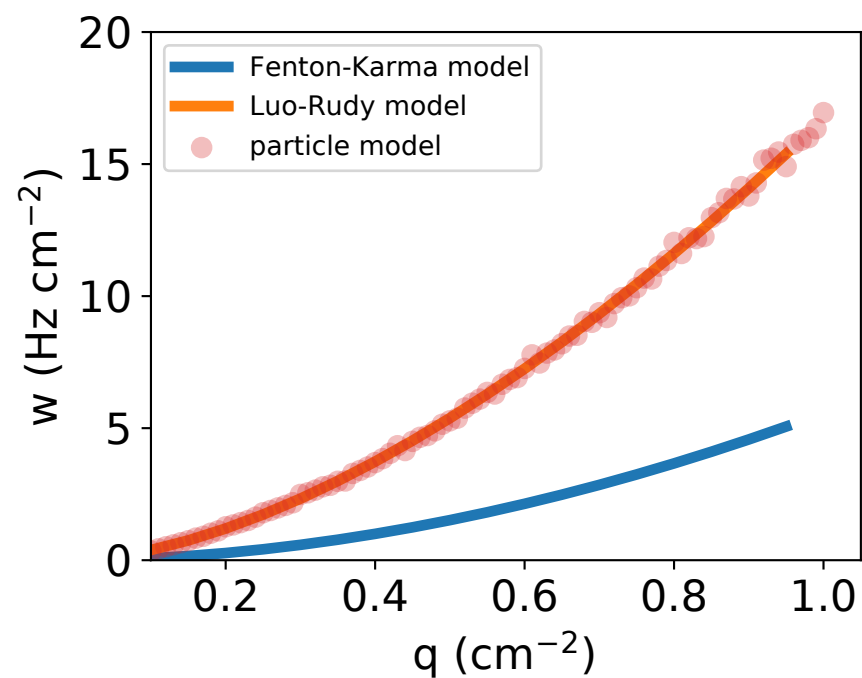
force_code=2, neighbors=0, reflect=0
 $r = 0.27918$ cm, $\kappa = 100.00000$ Hz
 $D = 0.00000$ cm²/s, $a = 28.58740$ cm²/s, $x_0 = 0$ cm



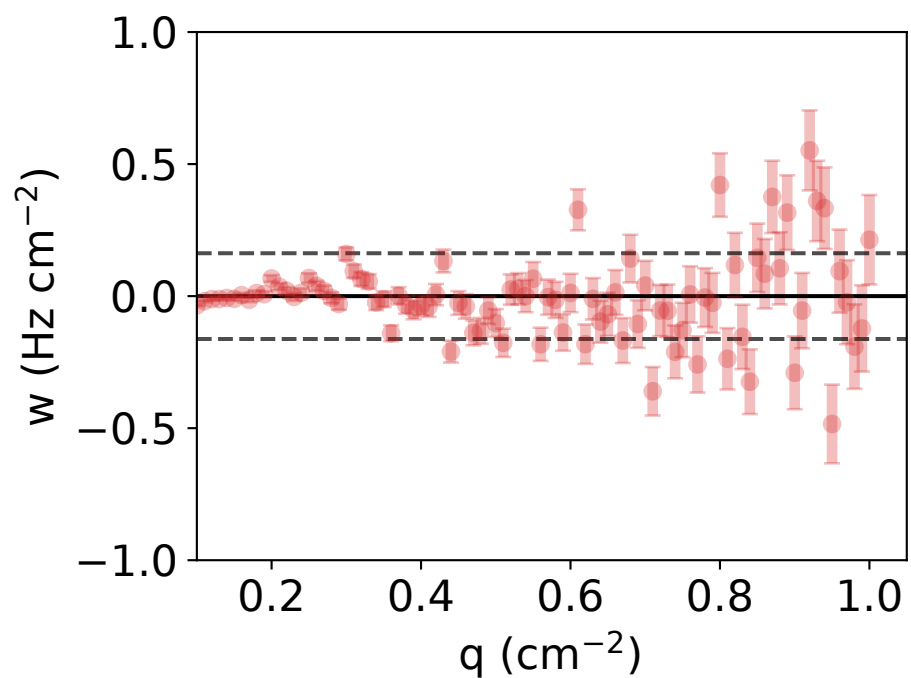
$\nu = 1.642 \pm 0.008$, $M = 16.605 \pm 0.382$ cm²($\nu - 1$)/s
 $RMSE_{particle\ vs\ full} = 0.165$ Hz/cm²



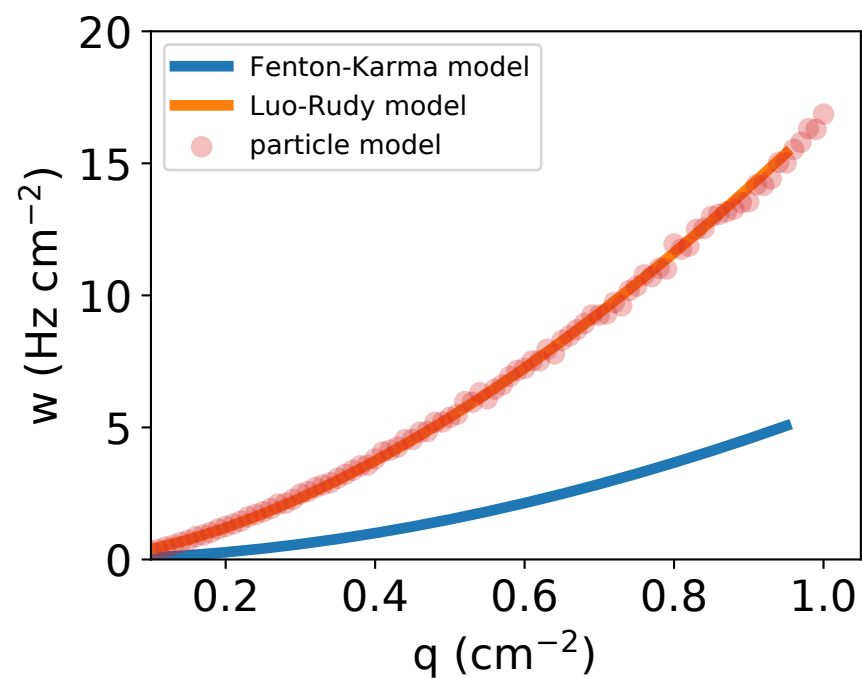
force_code=2, neighbors=0, reflect=0
 $r = 0.30249$ cm, $\kappa = 100.00000$ Hz
 $D = 0.70861$ cm²/s, $a = 14.00650$ cm²/s, $x_0 = 0$ cm



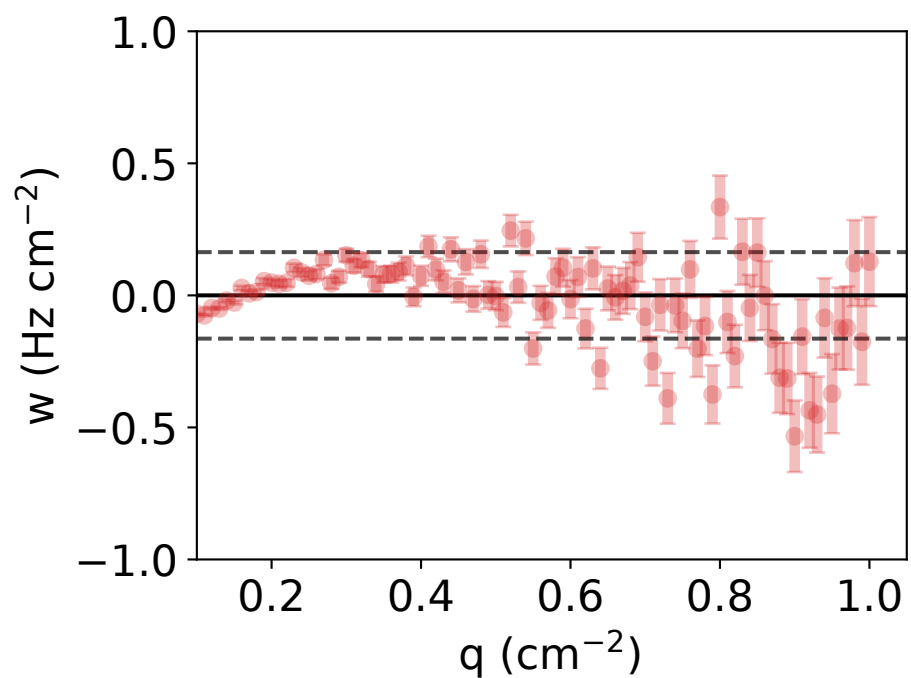
$\nu = 1.641 \pm 0.008$, $M = 16.735 \pm 0.394$ cm²($\nu - 1$)/s
 $RMSE_{particle\ vs\ full} = 0.162$ Hz/cm²



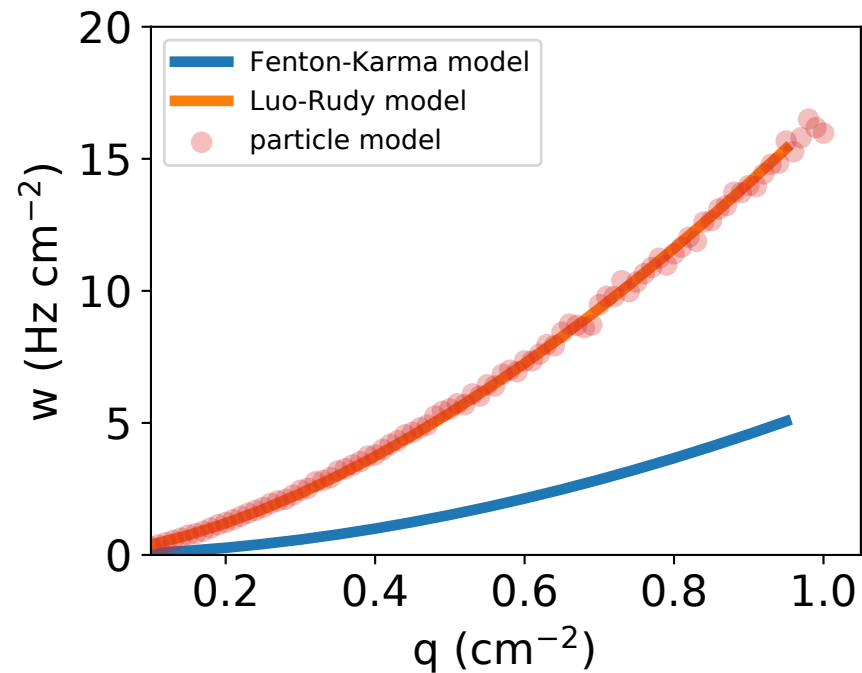
force_code=2, neighbors=0, reflect=0
 $r = 0.17587$ cm, $\kappa = 250.00000$ Hz
 $D = 0.13394$ cm²/s, $a = 10.51300$ cm²/s, $x_0 = 0$ cm



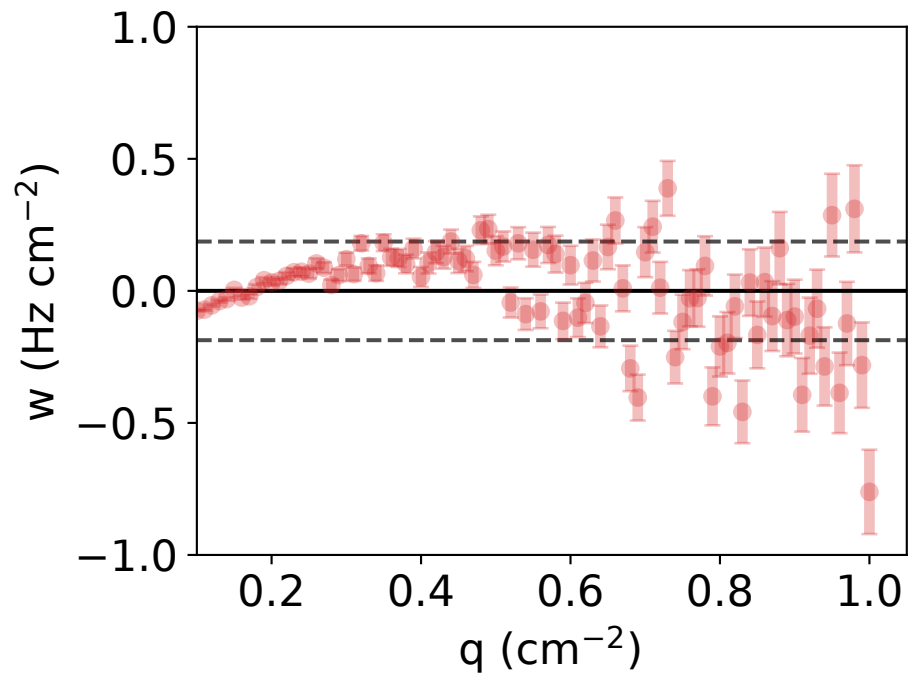
$\nu = 1.644 \pm 0.014$, $M = 16.365 \pm 0.564$ cm²($\nu - 1$)/s
 $RMSE_{particle\ vs\ full} = 0.164$ Hz/cm²



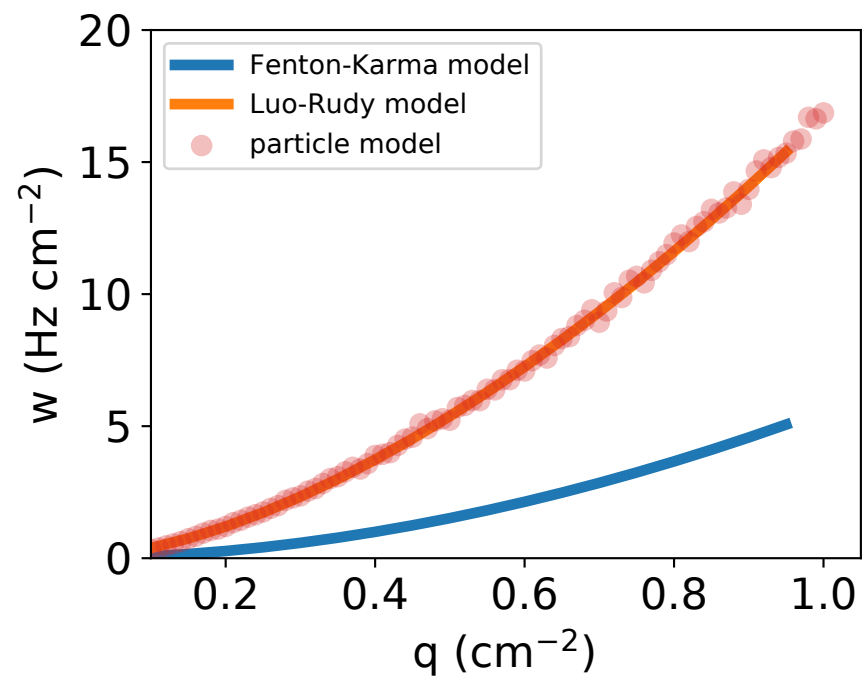
force_code=2, neighbors=0, reflect=0
 $r = 0.15643$ cm, $\kappa = 305.32700$ Hz
 $D = 0.28935$ cm²/s, $a = 9.60483$ cm²/s, $x_0 = 0$ cm



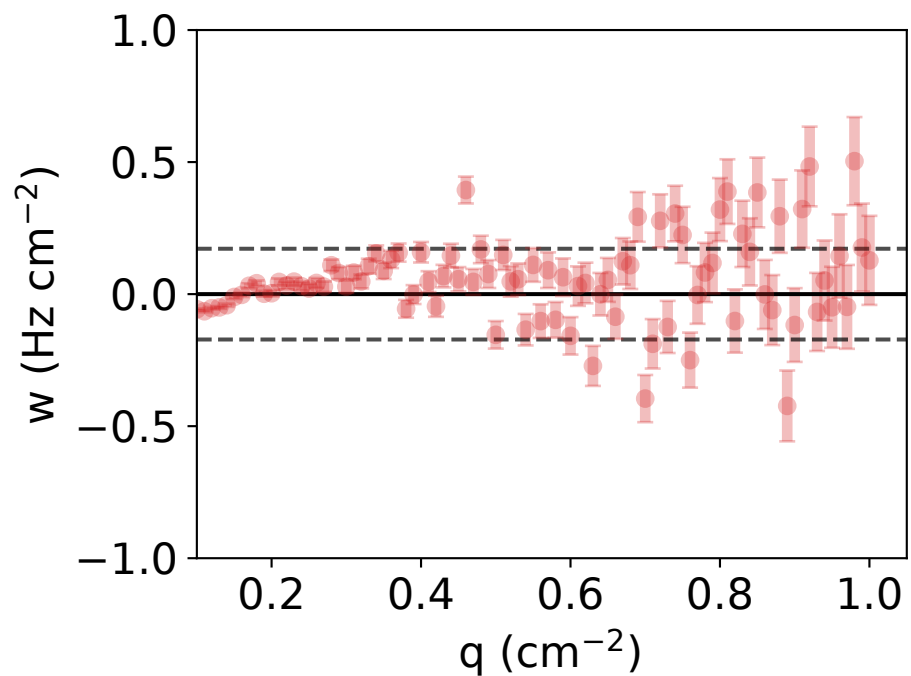
$\nu = 1.649 \pm 0.015$, $M = 16.365 \pm 0.599$ cm²($\nu - 1$)/s
 $RMSE_{particle \text{ vs full}} = 0.187$ Hz/cm²



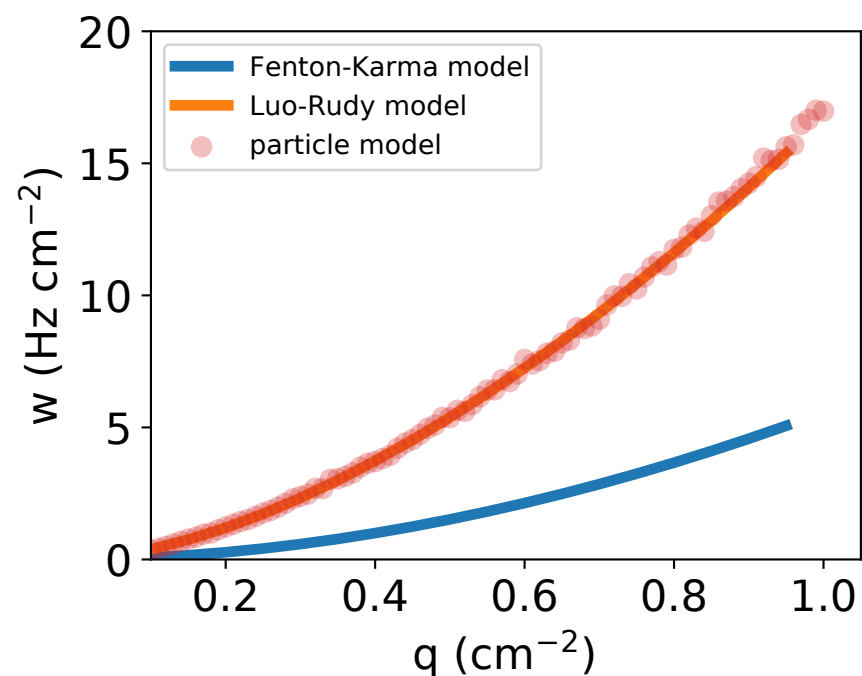
force_code=2, neighbors=0, reflect=0
 $r = 0.20554$ cm, $\kappa = 201.50700$ Hz
 $D = 0.50000$ cm²/s, $a = 10.48410$ cm²/s, $x_0 = 0$ cm



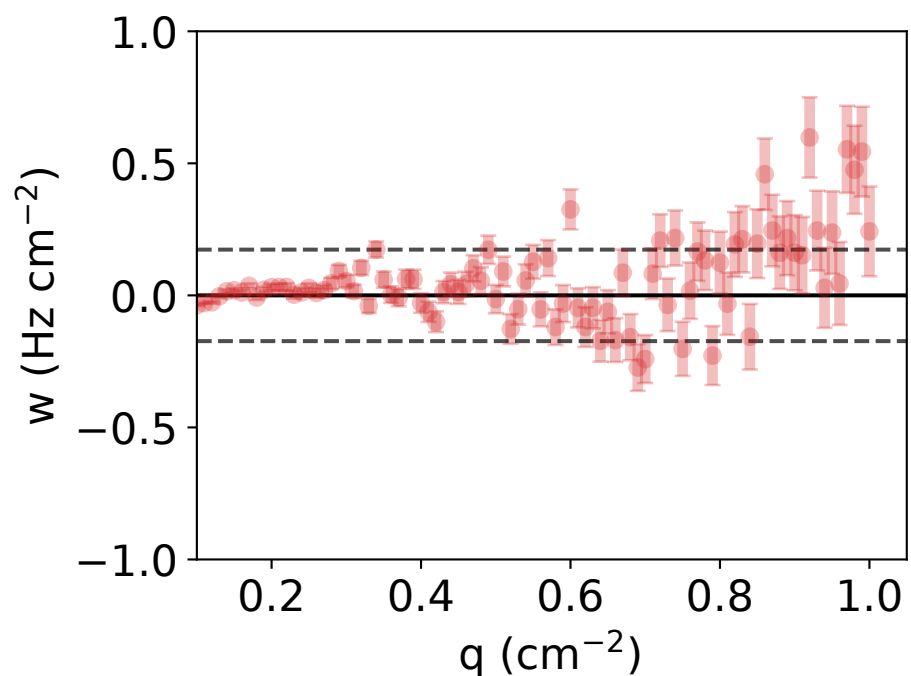
$\nu = 1.657 \pm 0.012$, $M = 16.737 \pm 0.524$ cm²($\nu - 1$)/s
 $RMSE_{particle \text{ vs full}} = 0.172$ Hz/cm²



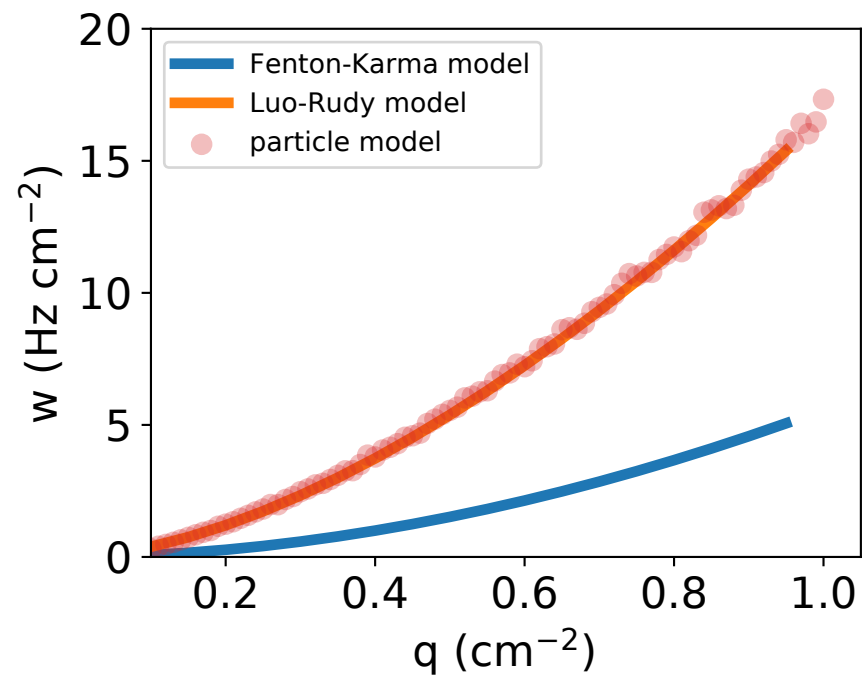
force_code=2, neighbors=0, reflect=0
 $r = 0.30681$ cm, $\kappa = 100.00000$ Hz
 $D = 0.32096$ cm²/s, $a = 14.24210$ cm²/s, $x_0 = 0$ cm



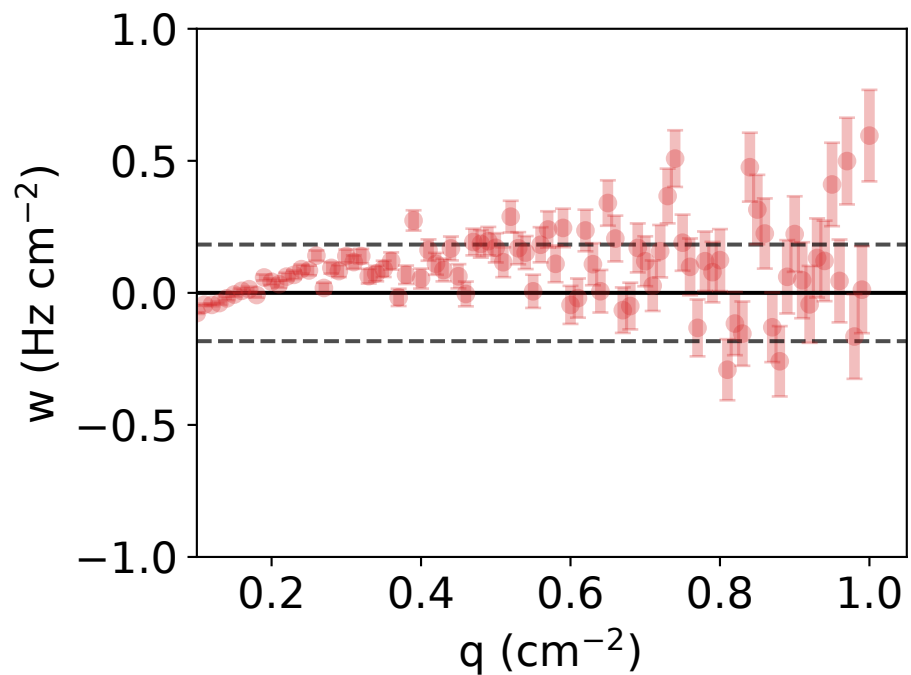
$\nu = 1.645 \pm 0.008$, $M = 16.927 \pm 0.379$ cm²($\nu - 1$)/s
 $RMSE_{particle \text{ vs full}} = 0.173$ Hz/cm²



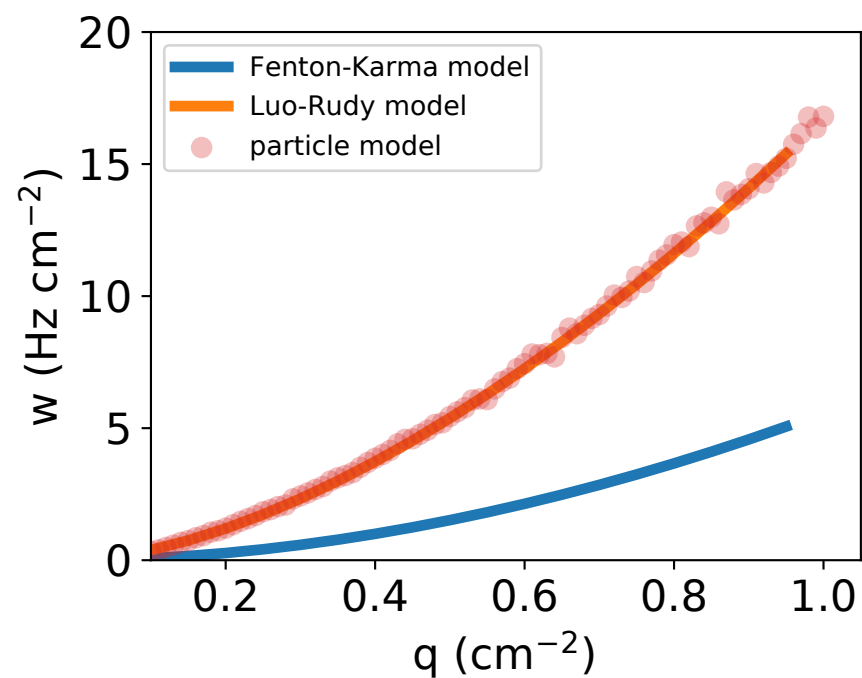
force_code=2, neighbors=0, reflect=0
 $r = 0.20312$ cm, $\kappa = 207.80400$ Hz
 $D = 0.45318$ cm²/s, $a = 10.62610$ cm²/s, $x_0 = 0$ cm



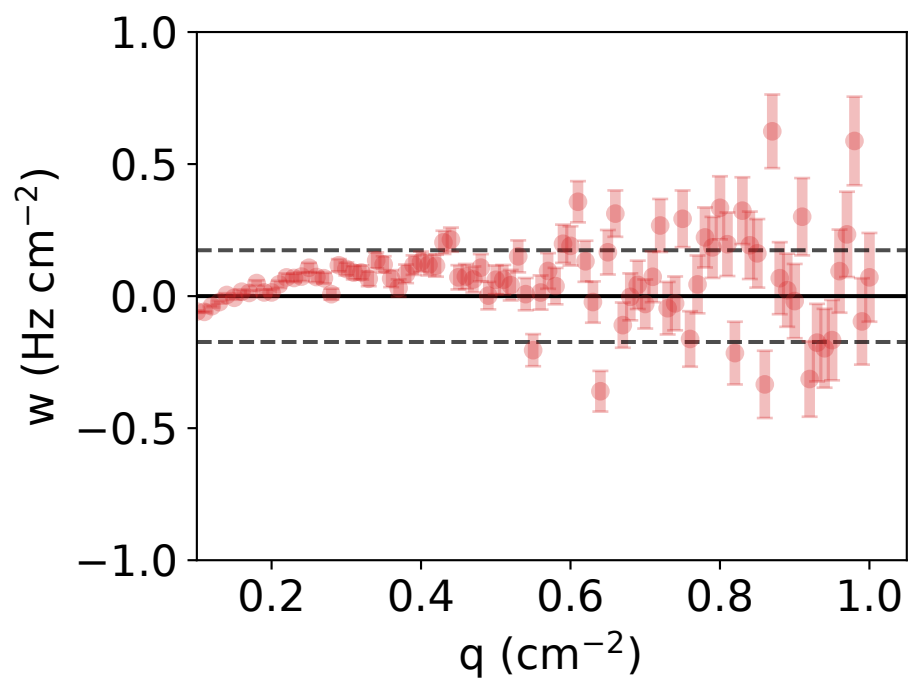
$\nu = 1.653 \pm 0.013$, $M = 16.730 \pm 0.533$ cm²($\nu - 1$)/s
 $RMSE_{particle\ vs\ full} = 0.183$ Hz/cm²



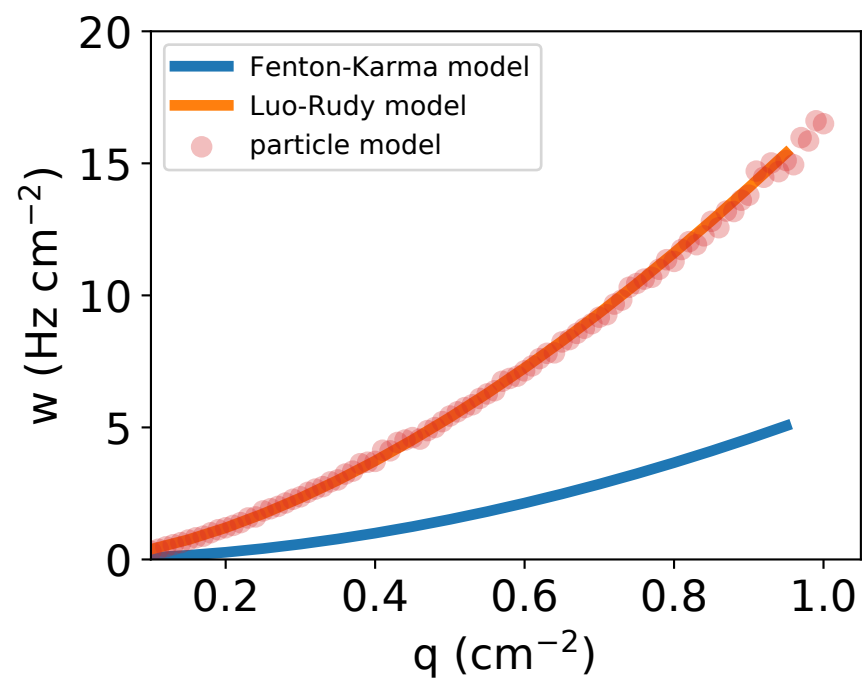
force_code=2, neighbors=0, reflect=0
 $r = 0.20546$ cm, $\kappa = 200.00000$ Hz
 $D = 0.65860$ cm²/s, $a = 10.71140$ cm²/s, $x_0 = 0$ cm



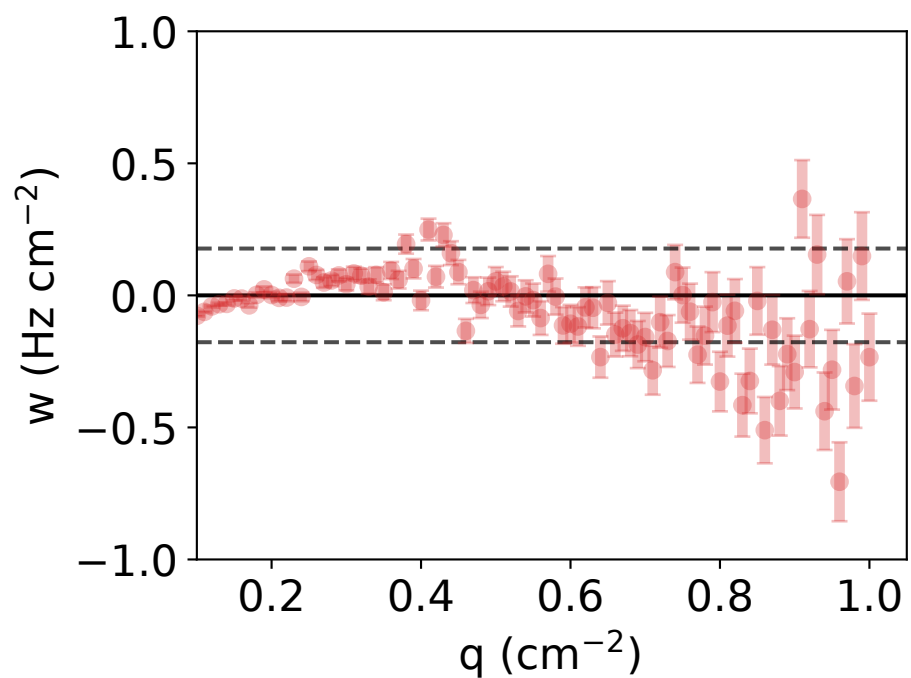
$\nu = 1.647 \pm 0.012$, $M = 16.690 \pm 0.500$ cm²($\nu - 1$)/s
 $RMSE_{particle\ vs\ full} = 0.174$ Hz/cm²



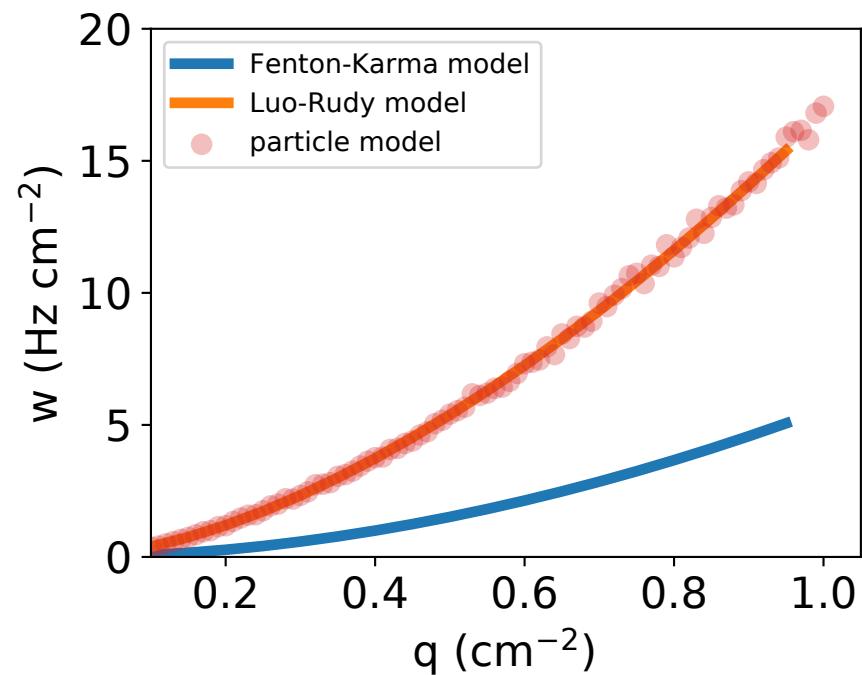
force_code=2, neighbors=0, reflect=0
 $r = 0.19581$ cm, $\kappa = 216.03700$ Hz
 $D = 0.34009$ cm²/s, $a = 10.47550$ cm²/s, $x_0 = 0$ cm



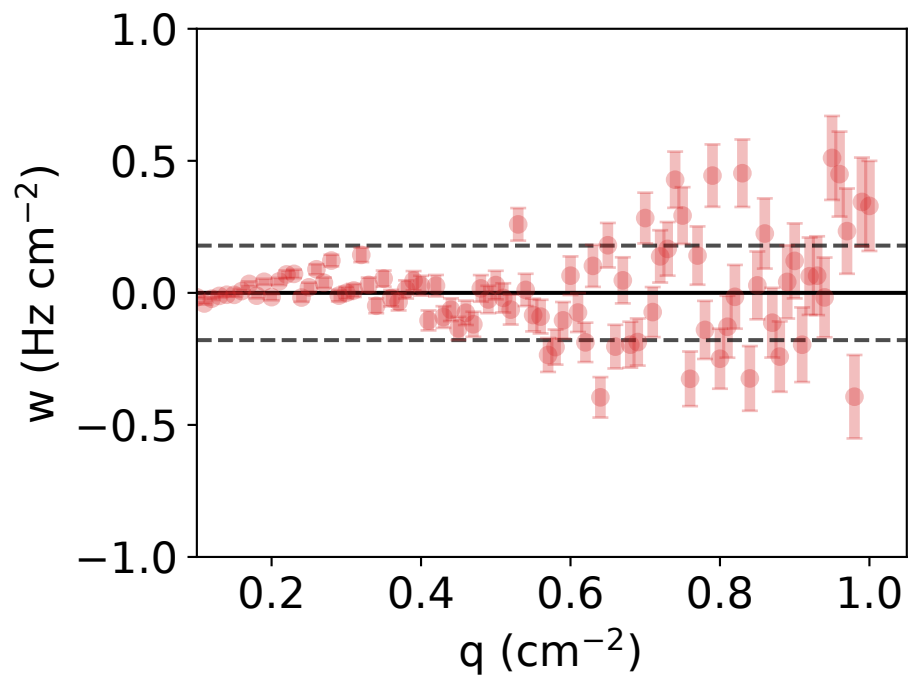
$\nu = 1.649 \pm 0.013$, $M = 16.329 \pm 0.519$ cm²($\nu - 1$)/s
 $RMSE_{particle\ vs\ full} = 0.177$ Hz/cm²



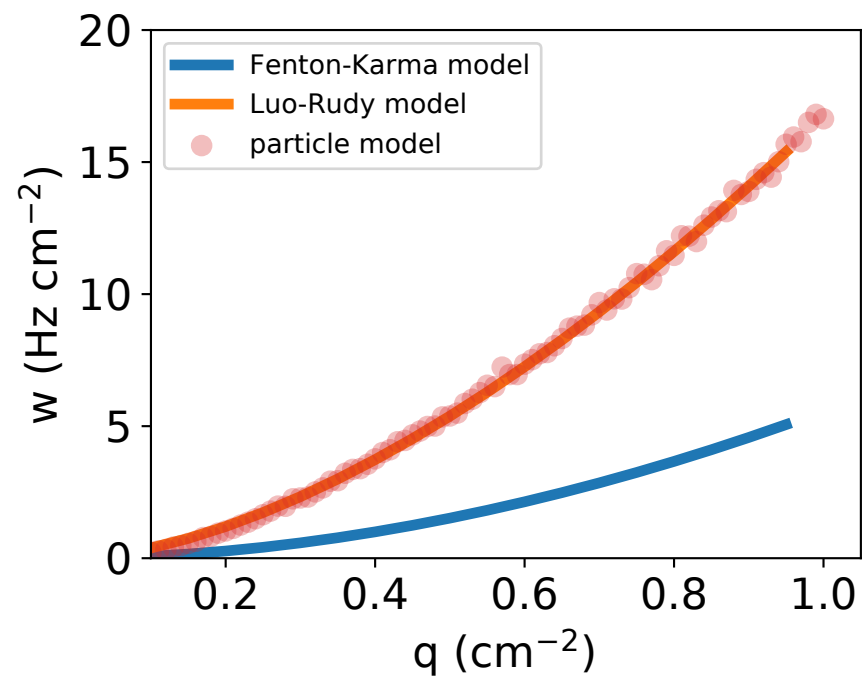
force_code=2, neighbors=0, reflect=0
 $r = 0.29445$ cm, $\kappa = 105.18700$ Hz
 $D = 0.11729$ cm²/s, $a = 14.50890$ cm²/s, $x_0 = 0$ cm



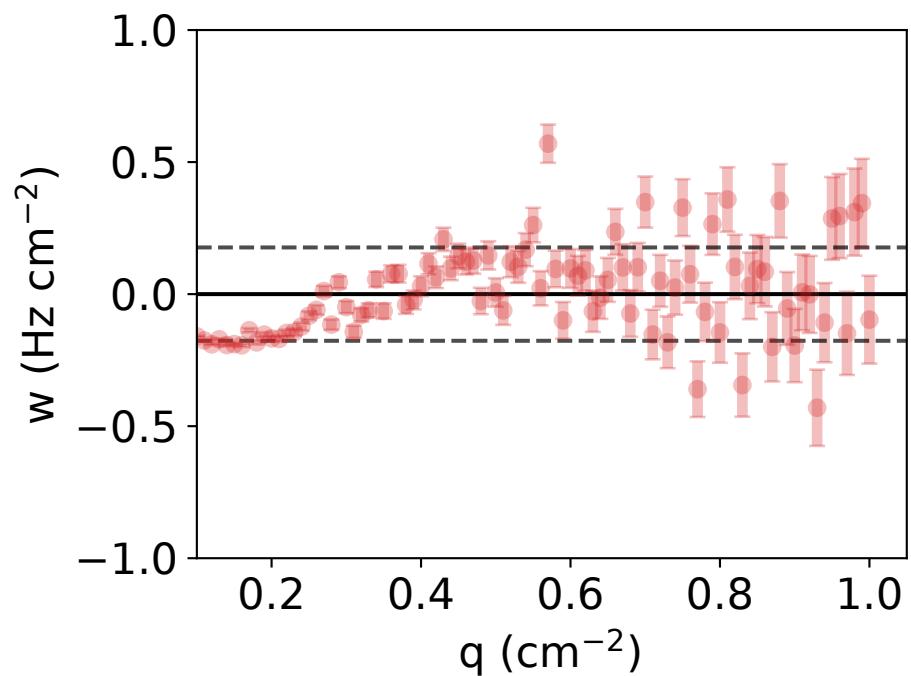
$\nu = 1.642 \pm 0.009$, $M = 16.795 \pm 0.432$ cm²($\nu - 1$)/s
 $RMSE_{particle \text{ vs full}} = 0.179$ Hz/cm²



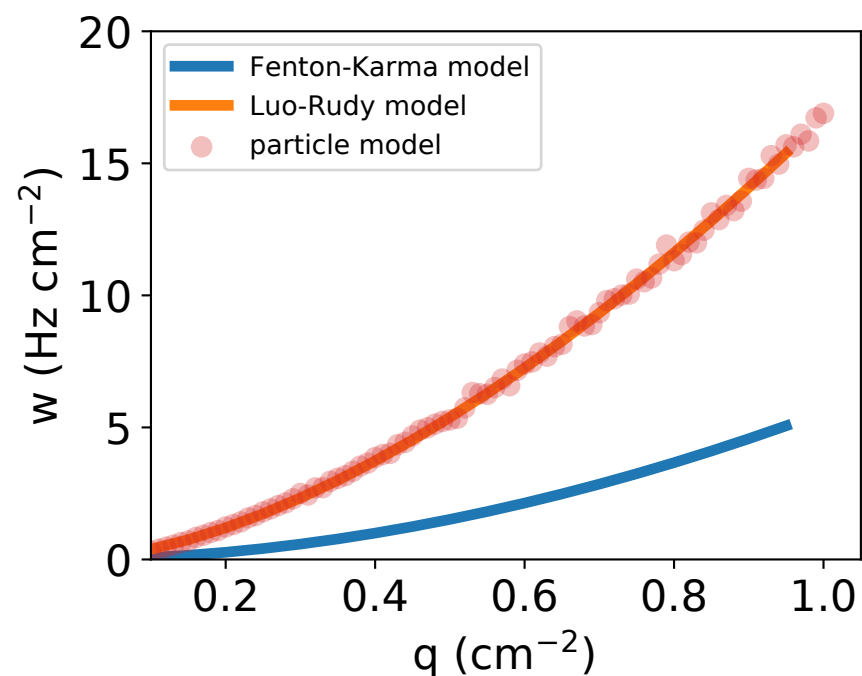
force_code=2, neighbors=0, reflect=0
 $r = 0.09877$ cm, $\kappa = 713.93400$ Hz
 $D = 0.67286$ cm²/s, $a = 6.37094$ cm²/s, $x_0 = 0$ cm



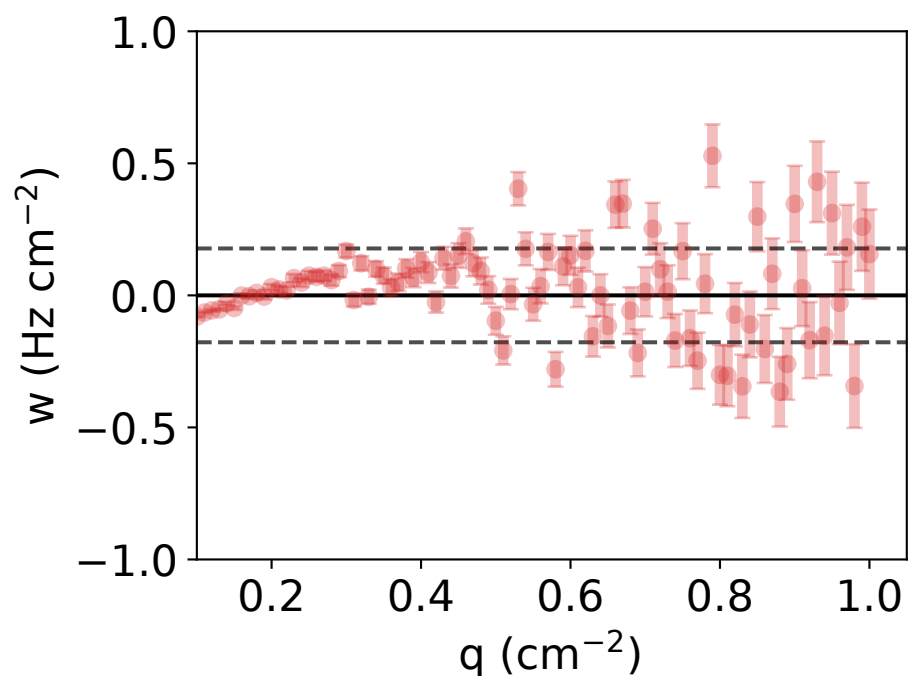
$\nu = 1.784 \pm 0.026$, $M = 16.581 \pm 1.033$ cm²($\nu - 1$)/s
 $RMSE_{particle \text{ vs full}} = 0.177$ Hz/cm²



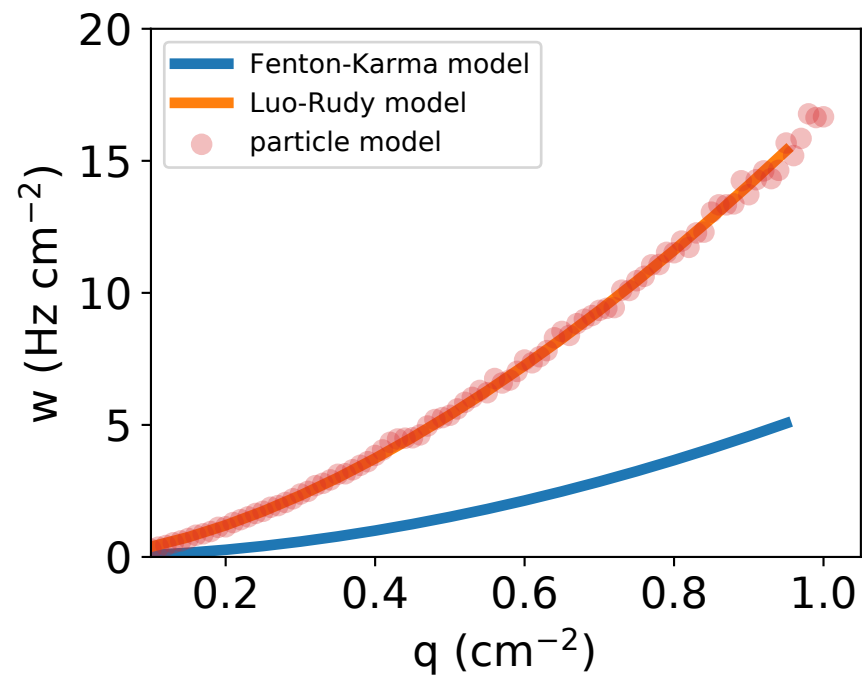
force_code=2, neighbors=0, reflect=0
 $r = 0.20014$ cm, $\kappa = 210.54500$ Hz
 $D = 0.38418$ cm²/s, $a = 10.38610$ cm²/s, $x_0 = 0$ cm



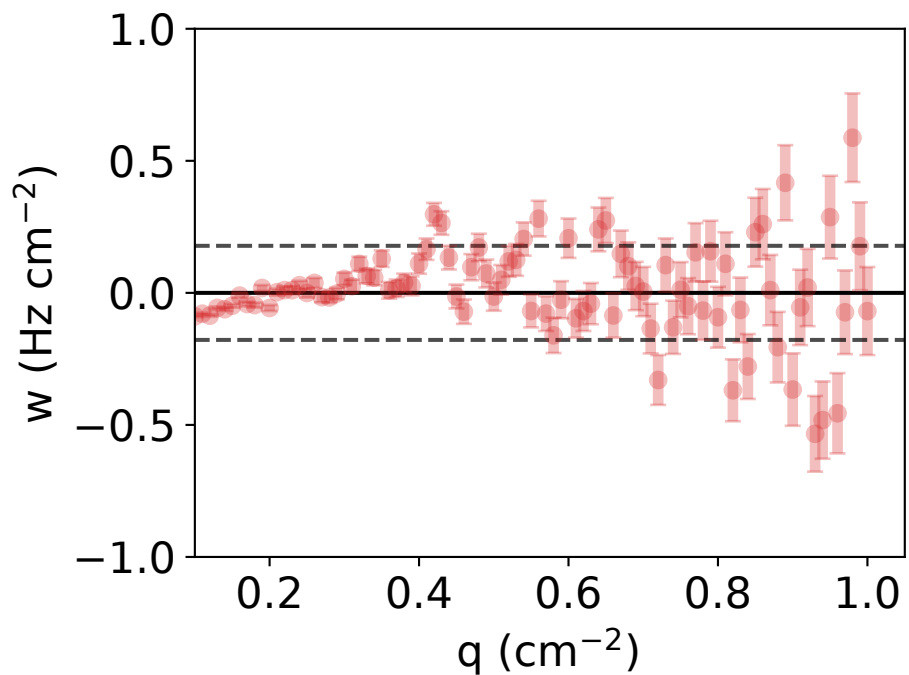
$\nu = 1.660 \pm 0.014$, $M = 16.584 \pm 0.589$ cm²($\nu - 1$)/s
 $RMSE_{particle \text{ vs full}} = 0.178$ Hz/cm²



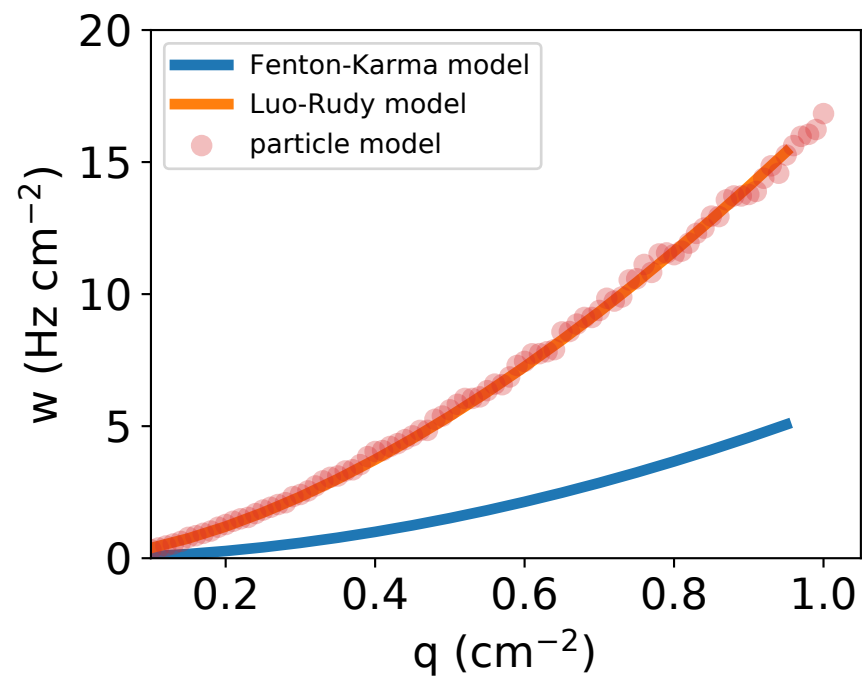
force_code=2, neighbors=0, reflect=0
 $r = 0.17534$ cm, $\kappa = 265.61500$ Hz
 $D = 0.20000$ cm²/s, $a = 9.50842$ cm²/s, $x_0 = 0$ cm



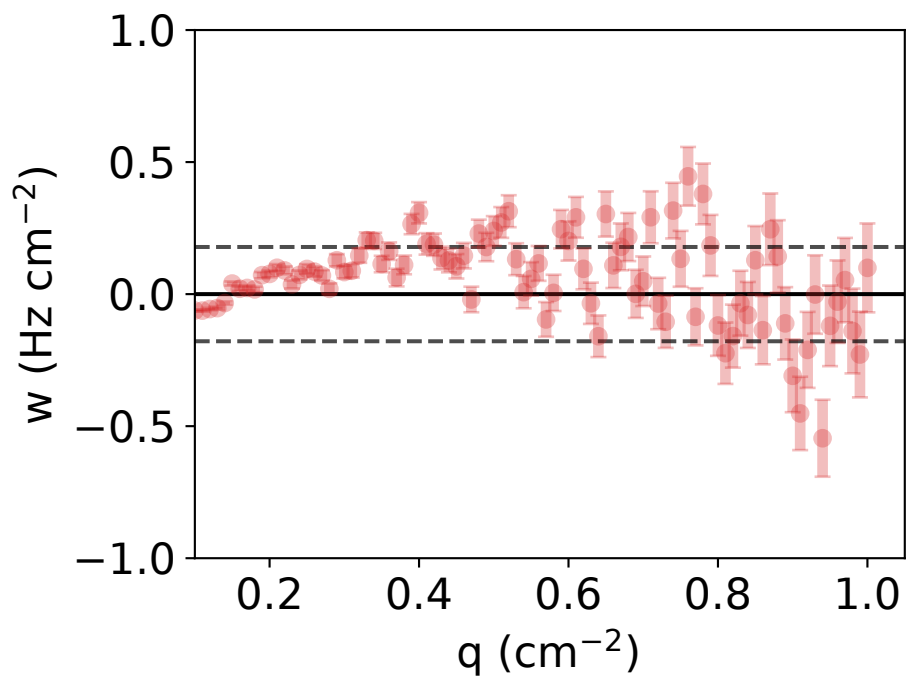
$\nu = 1.676 \pm 0.015$, $M = 16.538 \pm 0.613$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.178 Hz/cm²



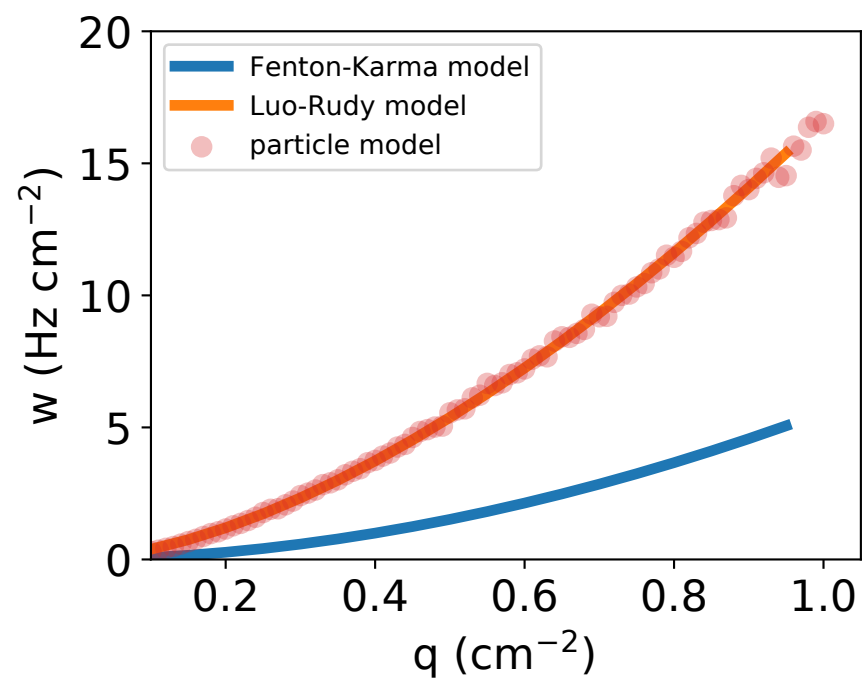
force_code=2, neighbors=0, reflect=0
 $r = 0.17609$ cm, $\kappa = 253.60000$ Hz
 $D = 0.69040$ cm²/s, $a = 10.12390$ cm²/s, $x_0 = 0$ cm



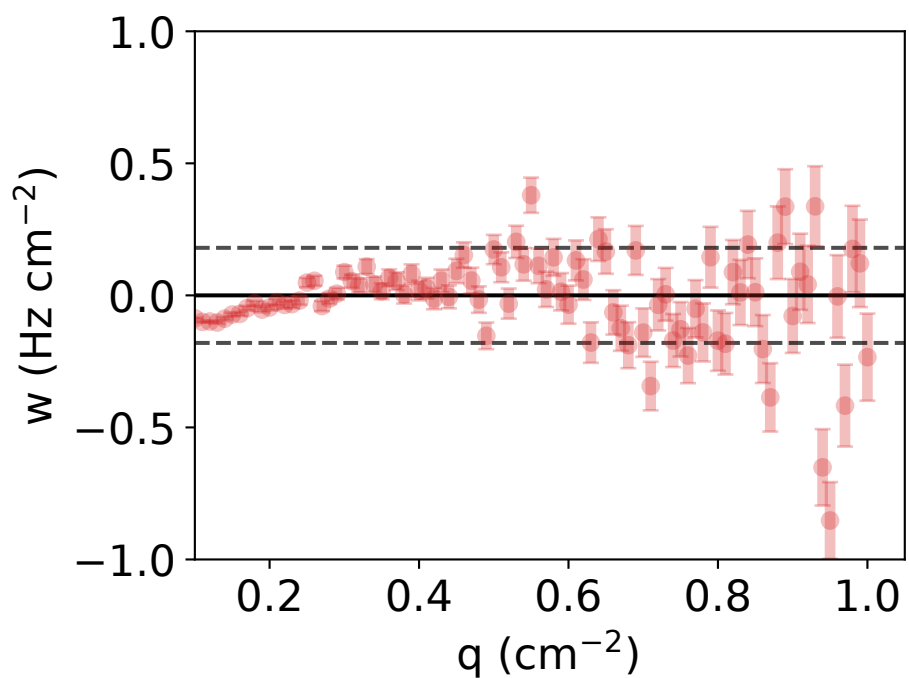
$\nu = 1.643 \pm 0.015$, $M = 16.462 \pm 0.597$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.179 Hz/cm²



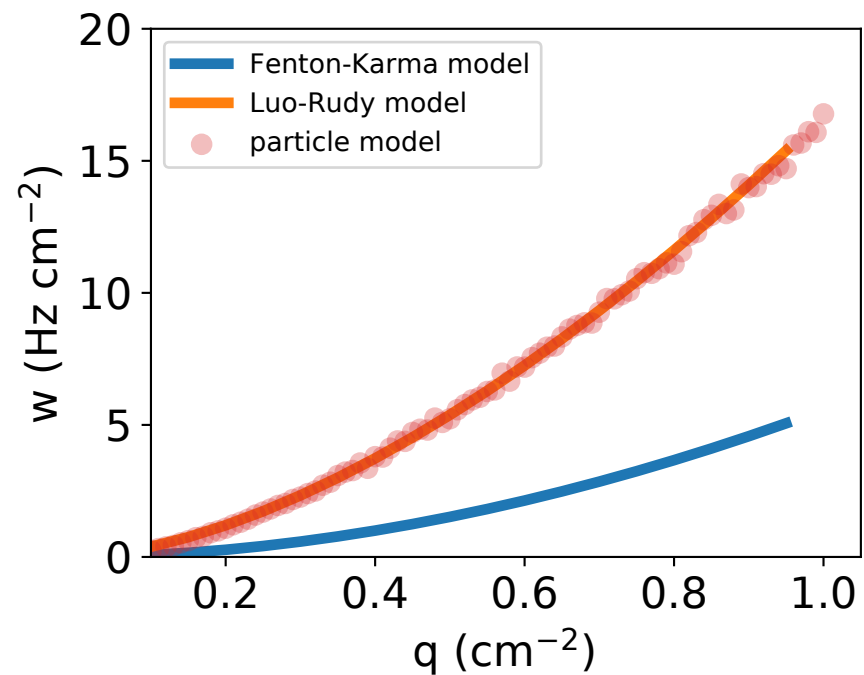
force_code=2, neighbors=0, reflect=0
 $r = 0.15649$ cm, $\kappa = 323.74600$ Hz
 $D = 0.15786$ cm²/s, $a = 8.76100$ cm²/s, $x_0 = 0$ cm



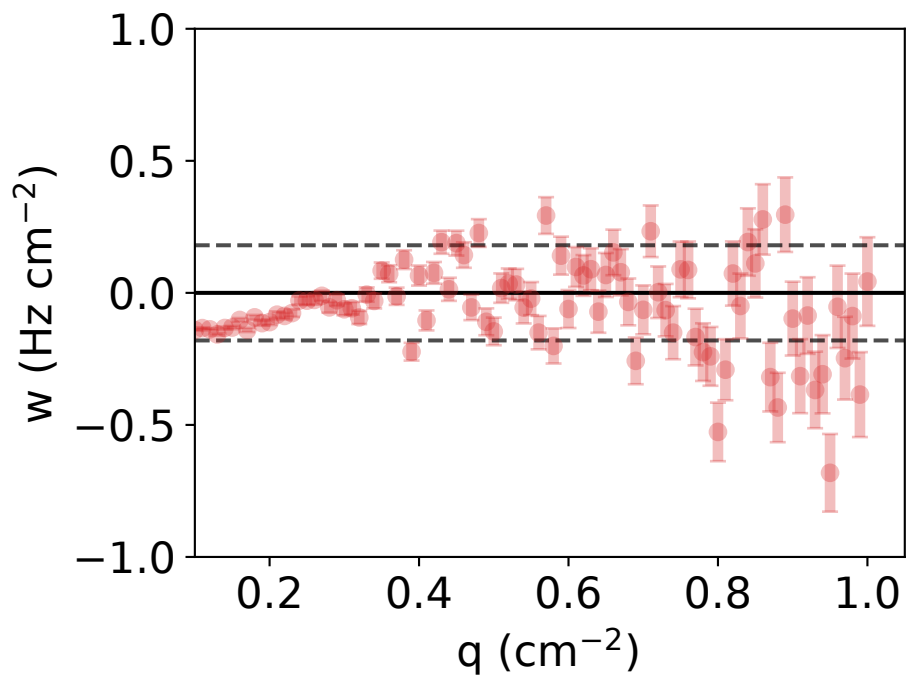
$\nu = 1.690 \pm 0.016$, $M = 16.471 \pm 0.649$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.180 Hz/cm²



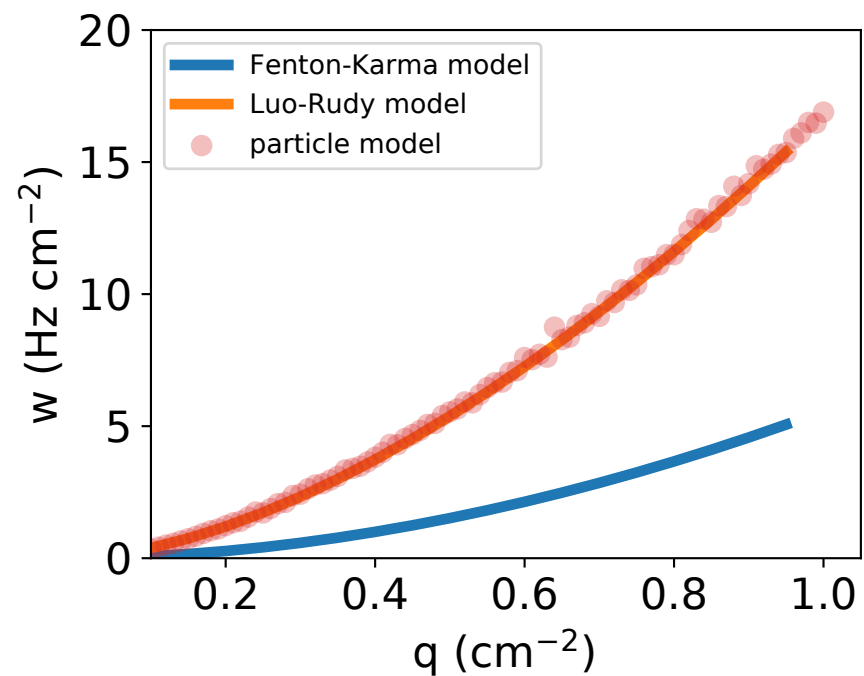
force_code=2, neighbors=0, reflect=0
 $r = 0.11328$ cm, $\kappa = 543.48400$ Hz
 $D = 0.17826$ cm²/s, $a = 7.28857$ cm²/s, $x_0 = 0$ cm



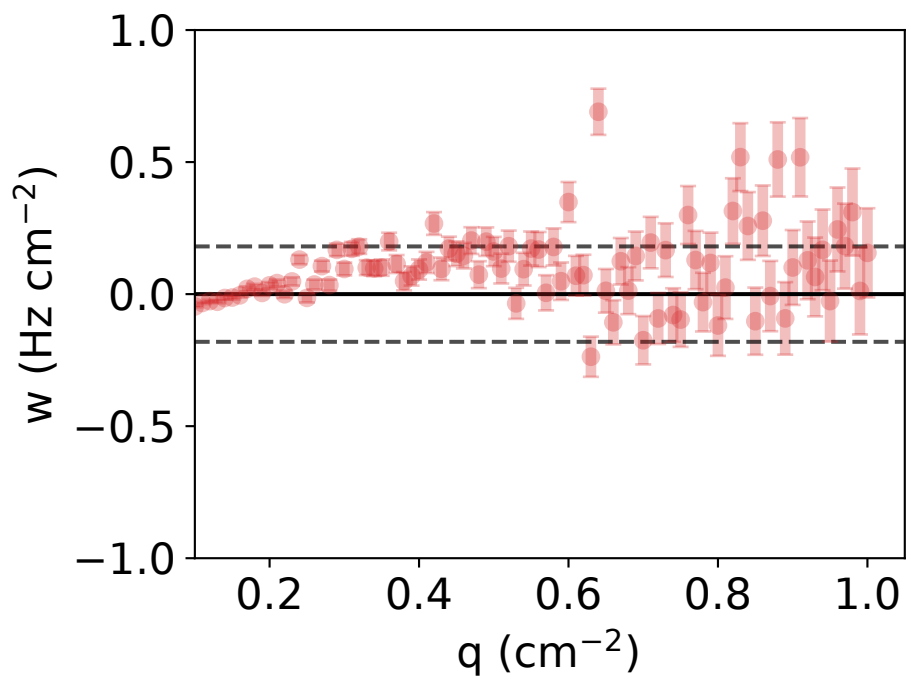
$\nu = 1.735 \pm 0.021$, $M = 16.387 \pm 0.839$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.180 Hz/cm²



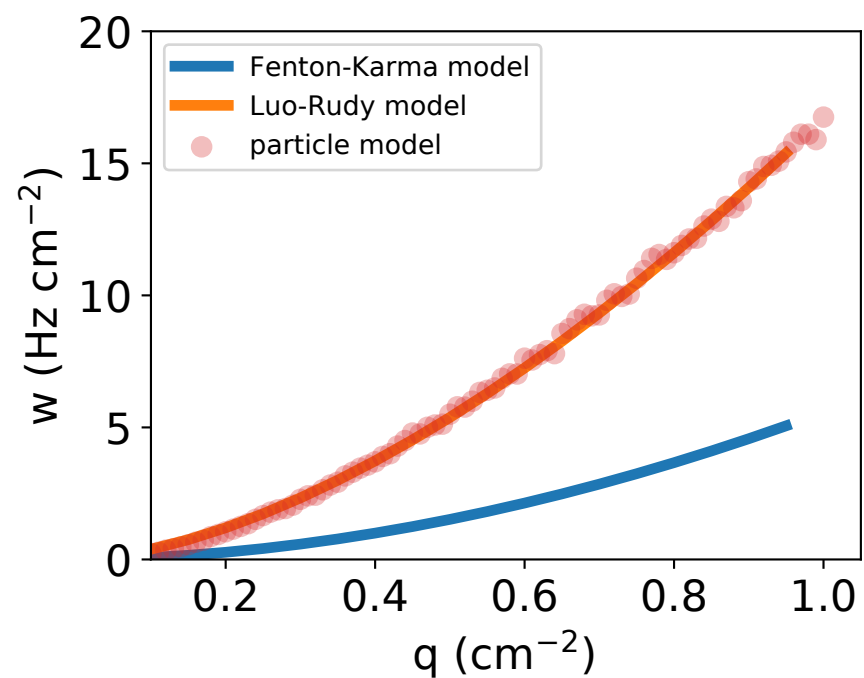
force_code=2, neighbors=0, reflect=0
 $r = 0.18607$ cm, $\kappa = 205.85100$ Hz
 $D = 0.00000$ cm²/s, $a = 21.04500$ cm²/s, $x_0 = 0$ cm



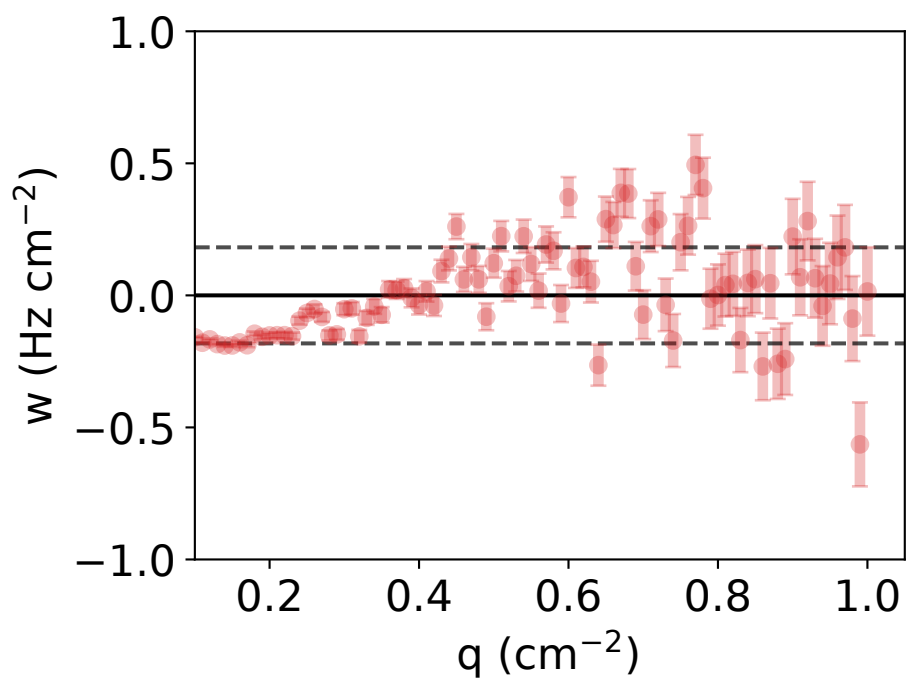
$\nu = 1.647 \pm 0.010$, $M = 16.773 \pm 0.462$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.181 Hz/cm²



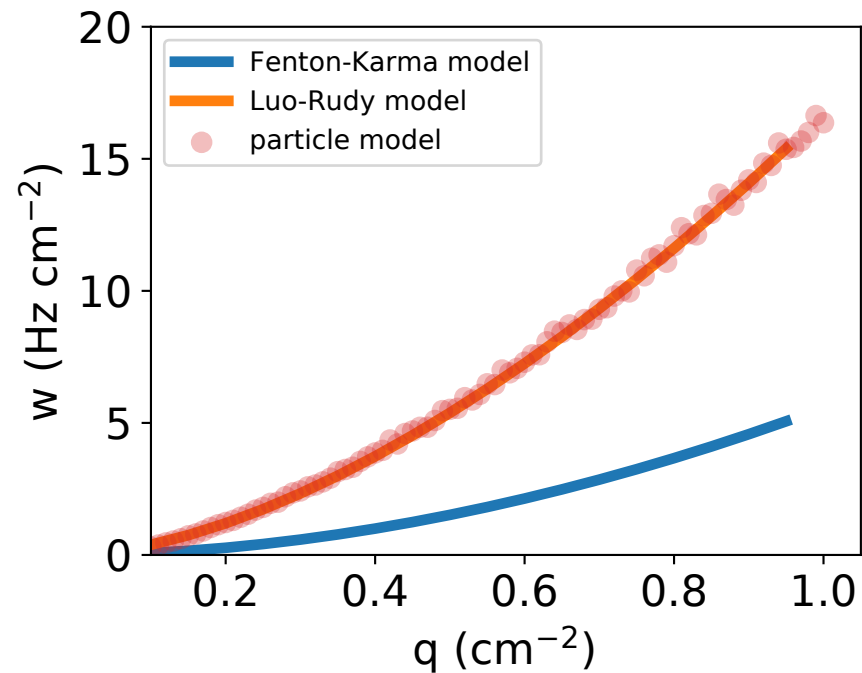
force_code=2, neighbors=0, reflect=0
 $r = 0.10185$ cm, $\kappa = 699.07800$ Hz
 $D = 0.50031$ cm²/s, $a = 6.29724$ cm²/s, $x_0 = 0$ cm



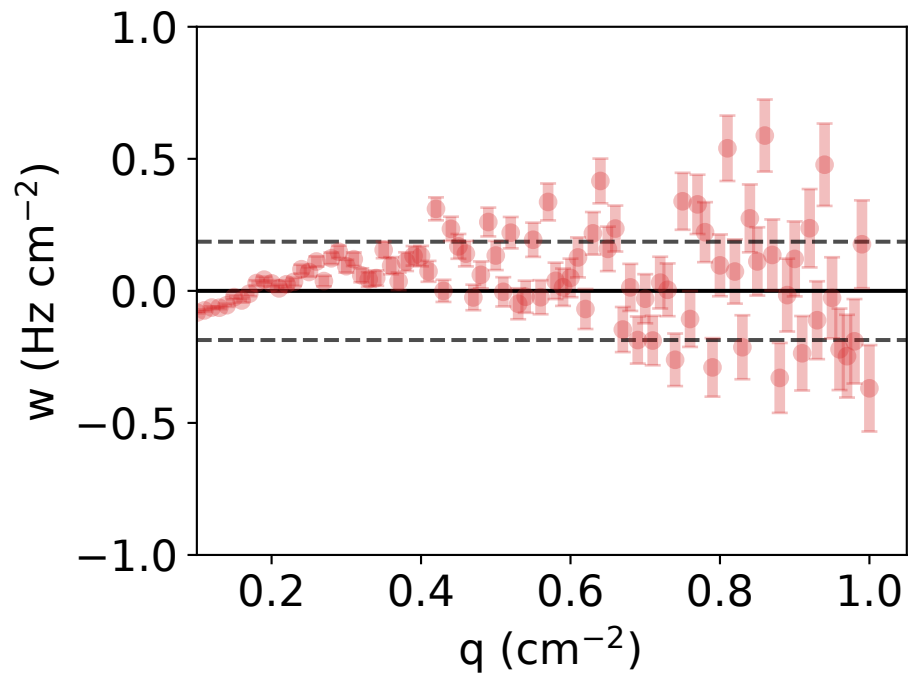
$\nu = 1.787 \pm 0.024$, $M = 16.627 \pm 0.997$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.182 Hz/cm²



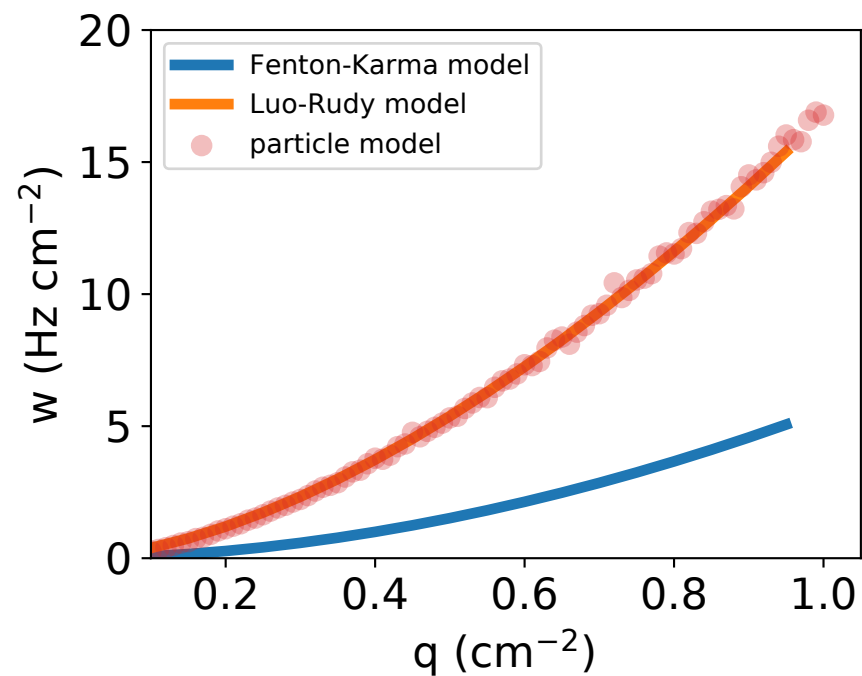
force_code=2, neighbors=0, reflect=0
 $r = 0.16935$ cm, $\kappa = 276.27100$ Hz
 $D = 0.17898$ cm²/s, $a = 9.72111$ cm²/s, $x_0 = 0$ cm



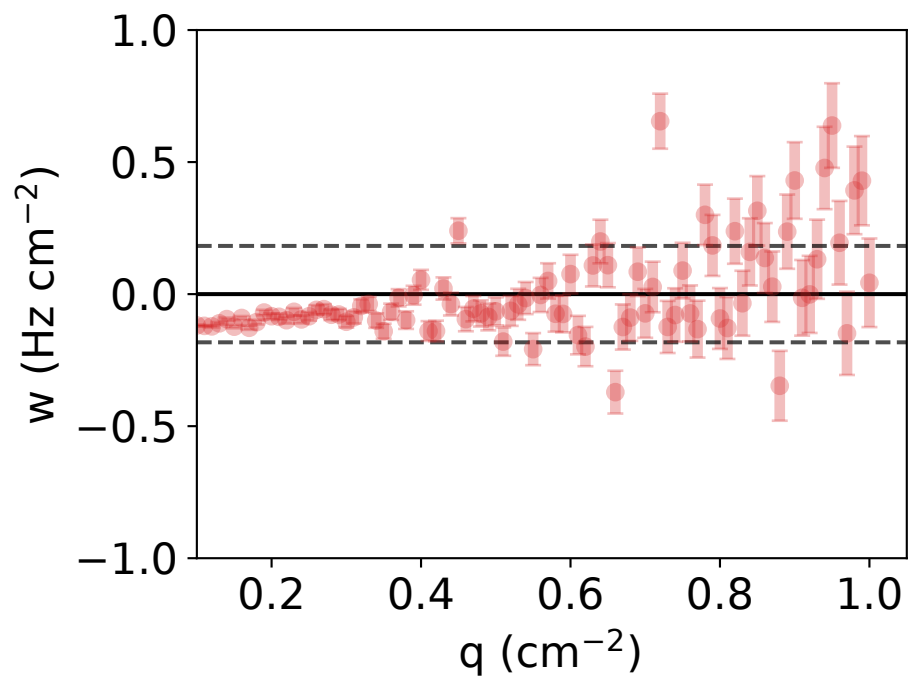
$\nu = 1.663 \pm 0.015$, $M = 16.572 \pm 0.633$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.186 Hz/cm²



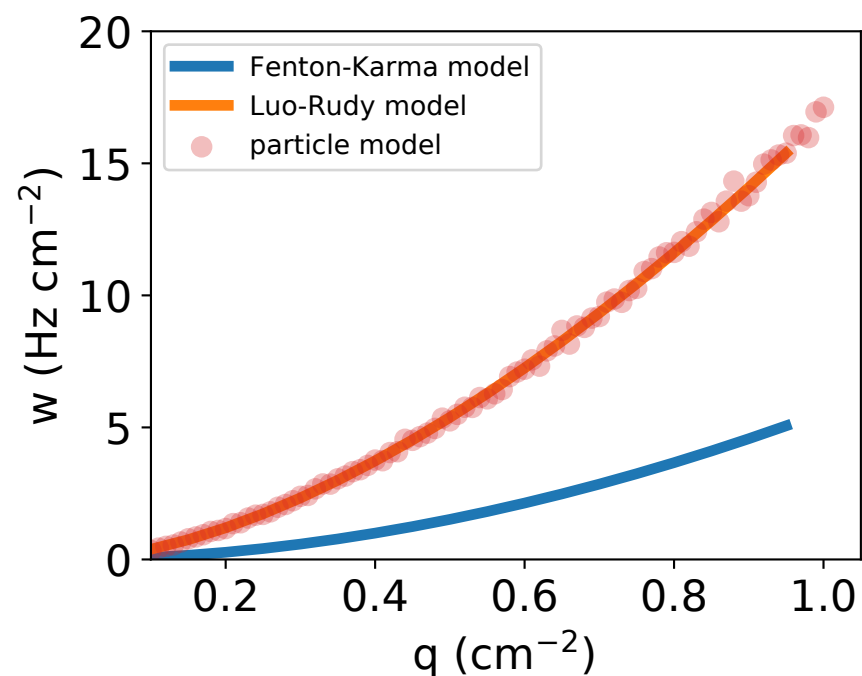
force_code=2, neighbors=0, reflect=0
 $r = 0.19403$ cm, $\kappa = 242.81500$ Hz
 $D = 0.39042$ cm²/s, $a = 8.27762$ cm²/s, $x_0 = 0$ cm



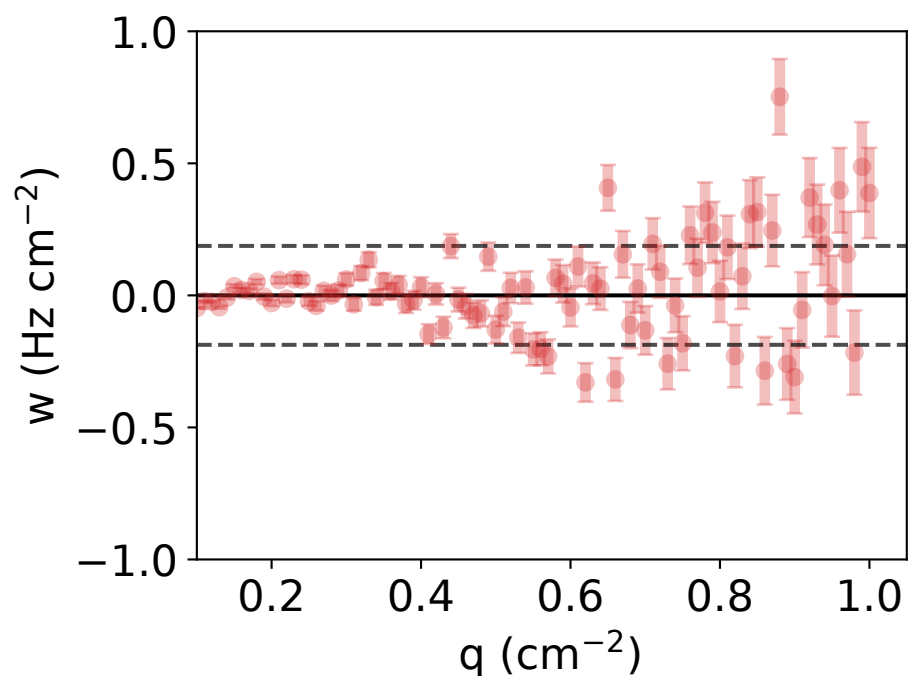
$\nu = 1.732 \pm 0.014$, $M = 16.876 \pm 0.585$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.183 Hz/cm²



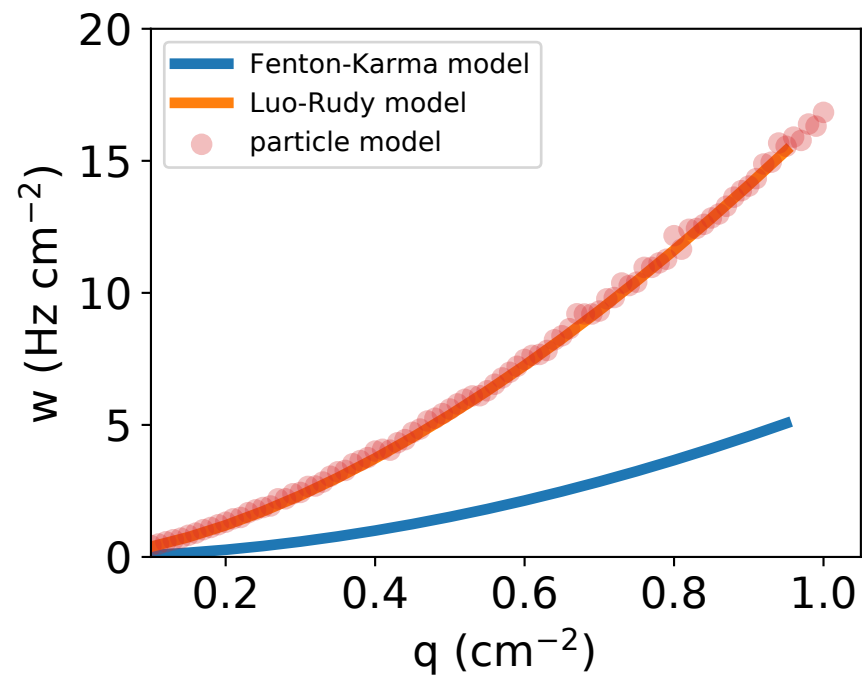
force_code=2, neighbors=0, reflect=0
 $r = 0.30312$ cm, $\kappa = 100.00000$ Hz
 $D = 0.57815$ cm²/s, $a = 14.01550$ cm²/s, $x_0 = 0$ cm



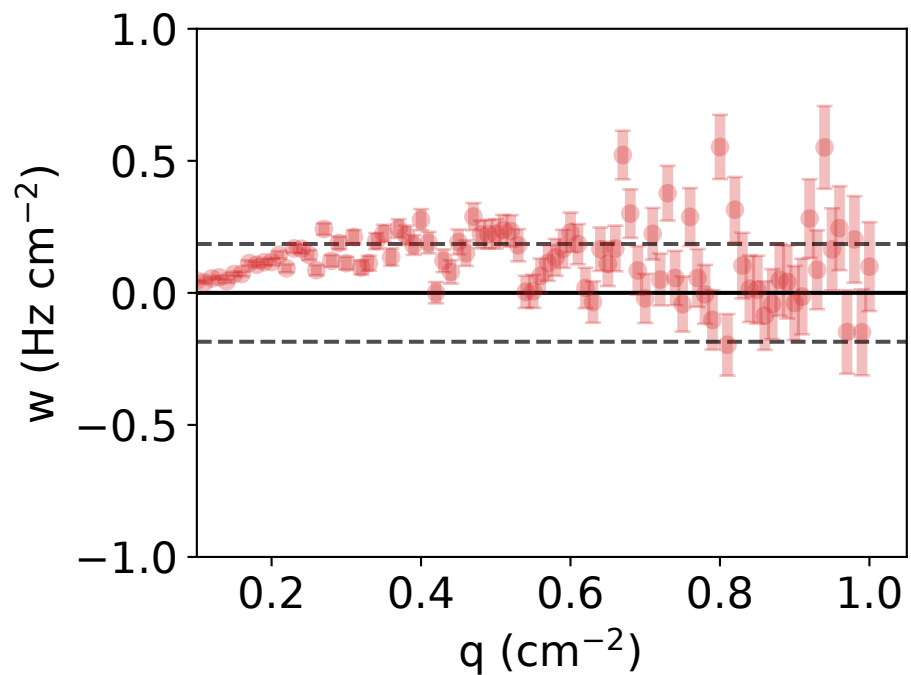
$\nu = 1.649 \pm 0.010$, $M = 16.864 \pm 0.459$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.187 Hz/cm²



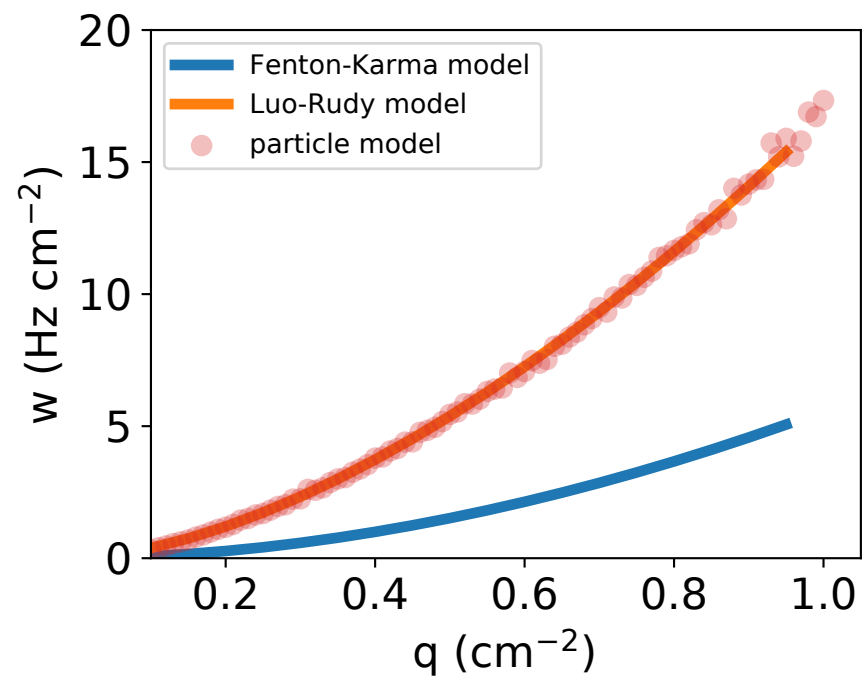
force_code=2, neighbors=0, reflect=0
 $r = 0.27987$ cm, $\kappa = 100.00000$ Hz
 $D = 0.00758$ cm²/s, $a = 28.21620$ cm²/s, $x_0 = 0$ cm



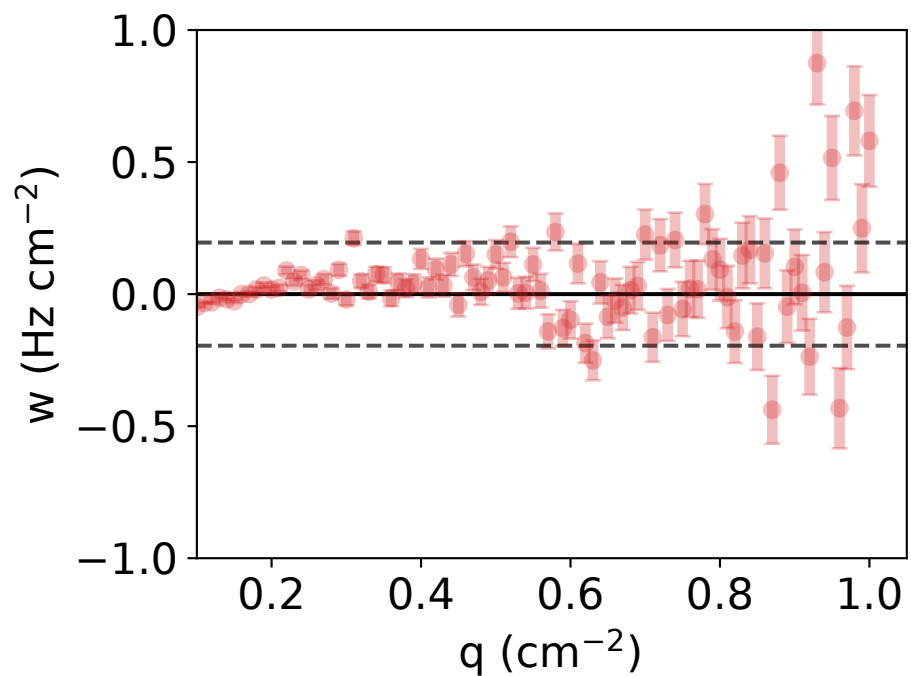
$\nu = 1.586 \pm 0.006$, $M = 16.728 \pm 0.313$ cm²($\nu - 1$)/s
 $RMSE_{particle\ vs\ full} = 0.185$ Hz/cm²



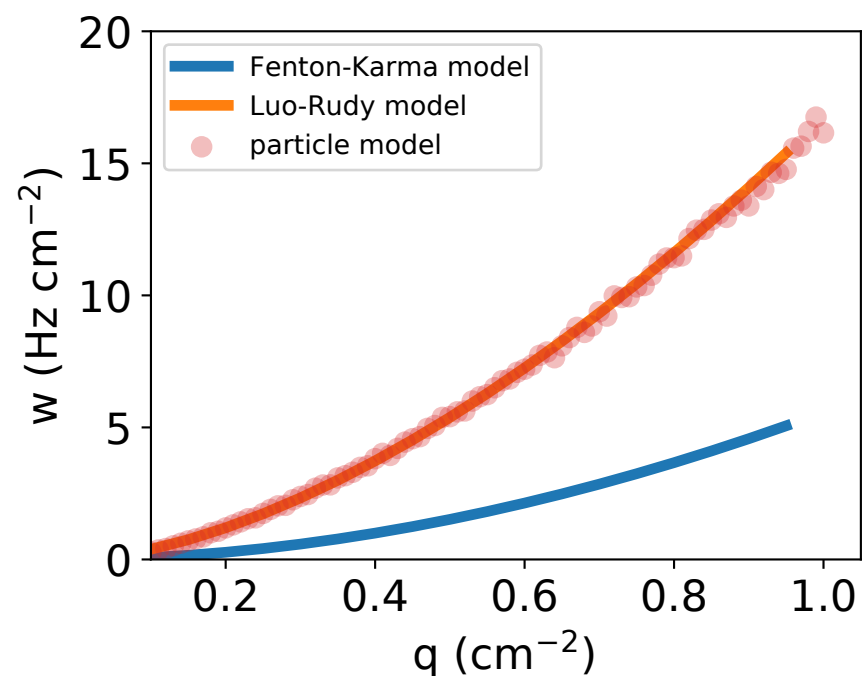
force_code=2, neighbors=0, reflect=0
 $r = 0.23803$ cm, $\kappa = 160.34900$ Hz
 $D = 0.16035$ cm²/s, $a = 10.93850$ cm²/s, $x_0 = 0$ cm



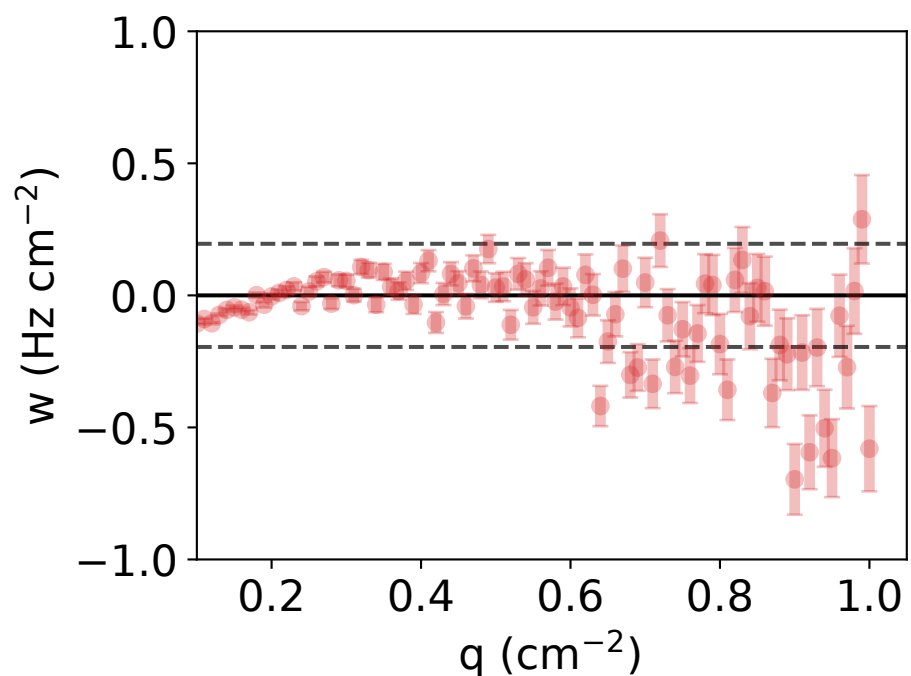
$\nu = 1.673 \pm 0.010$, $M = 16.805 \pm 0.458$ cm²($\nu - 1$)/s
 $RMSE_{particle\ vs\ full} = 0.195$ Hz/cm²



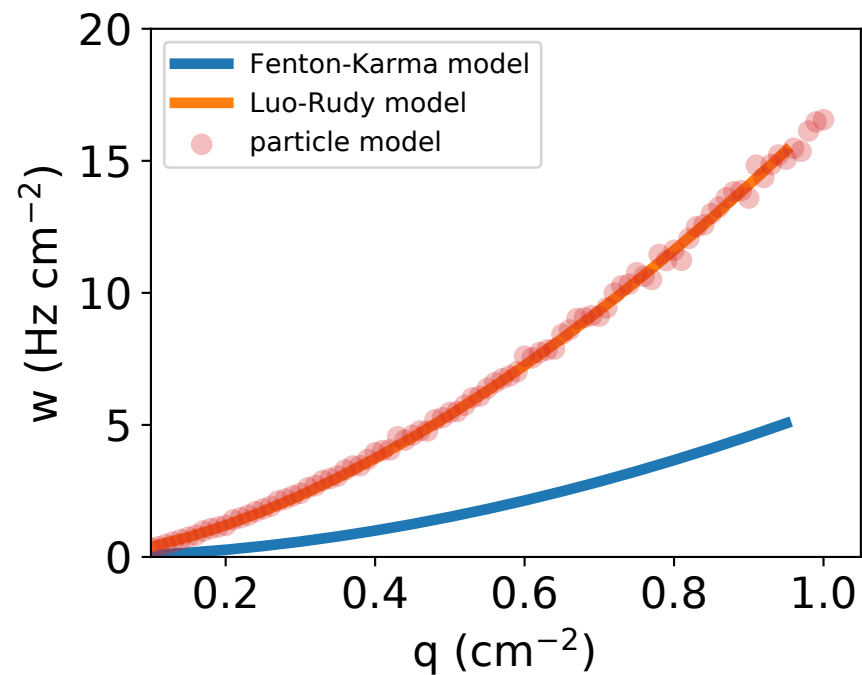
force_code=2, neighbors=0, reflect=0
 $r = 0.16891$ cm, $\kappa = 277.37200$ Hz
 $D = 0.35474$ cm²/s, $a = 9.10381$ cm²/s, $x_0 = 0$ cm



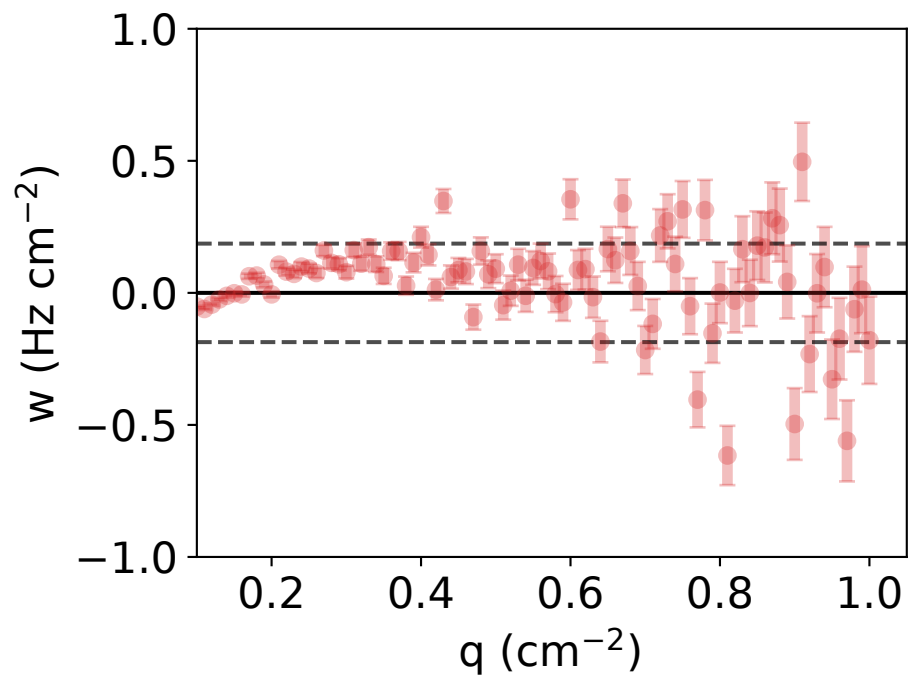
$\nu = 1.676 \pm 0.017$, $M = 16.289 \pm 0.661$ cm²($\nu - 1$)/s
 $RMSE_{particle\ vs\ full} = 0.195$ Hz/cm²



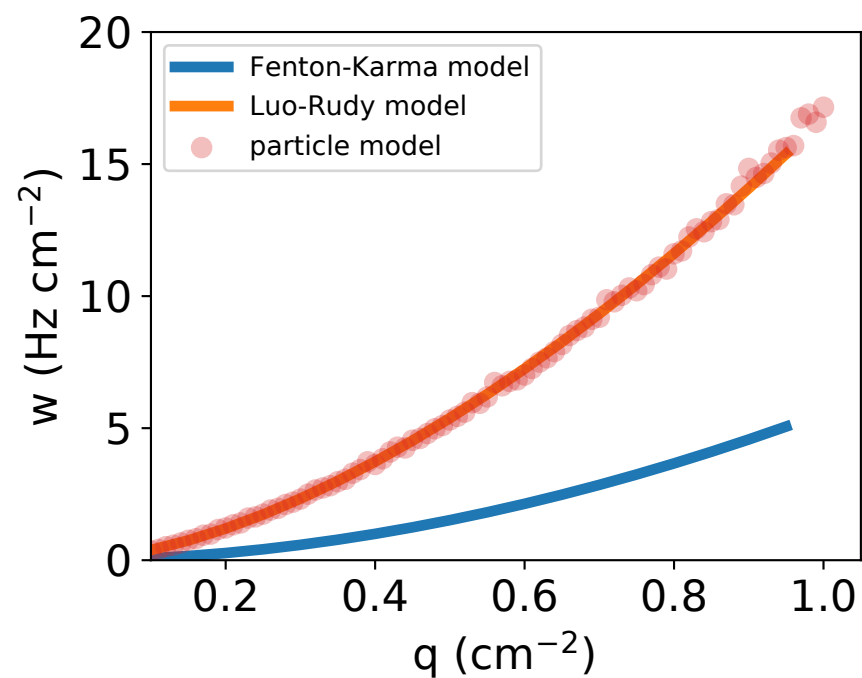
force_code=2, neighbors=0, reflect=0
 $r = 0.20382$ cm, $\kappa = 200.00000$ Hz
 $D = 0.80000$ cm²/s, $a = 10.79310$ cm²/s, $x_0 = 0$ cm



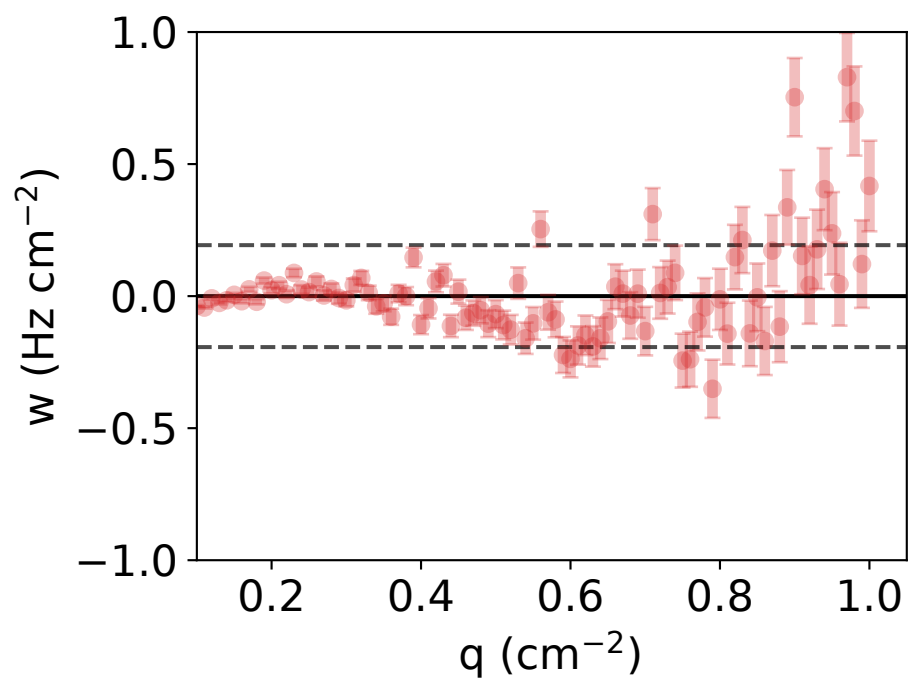
$\nu = 1.638 \pm 0.013$, $M = 16.513 \pm 0.564$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.187 Hz/cm²



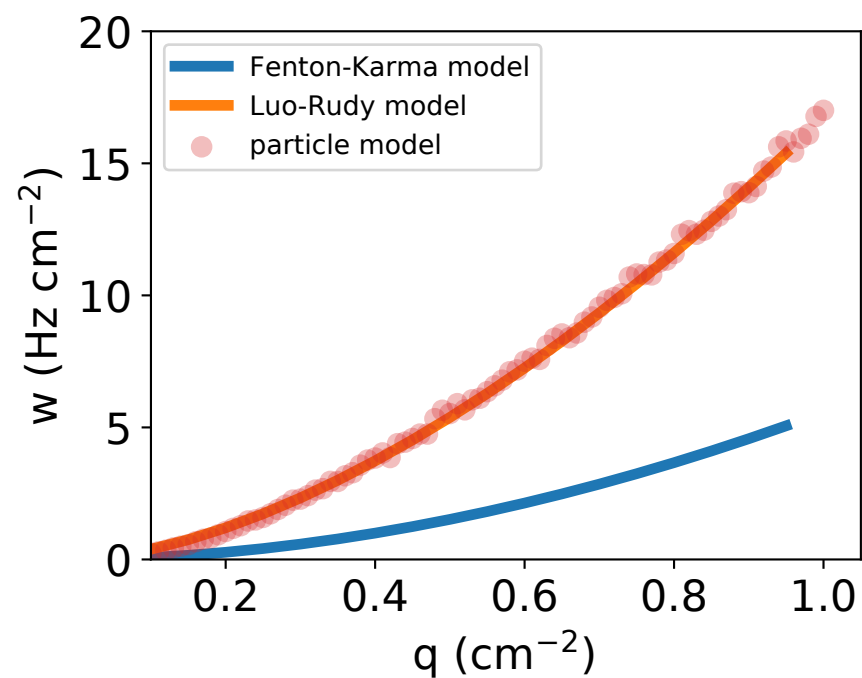
force_code=2, neighbors=0, reflect=0
 $r = 0.30476$ cm, $\kappa = 100.00000$ Hz
 $D = 0.56470$ cm²/s, $a = 13.98720$ cm²/s, $x_0 = 0$ cm



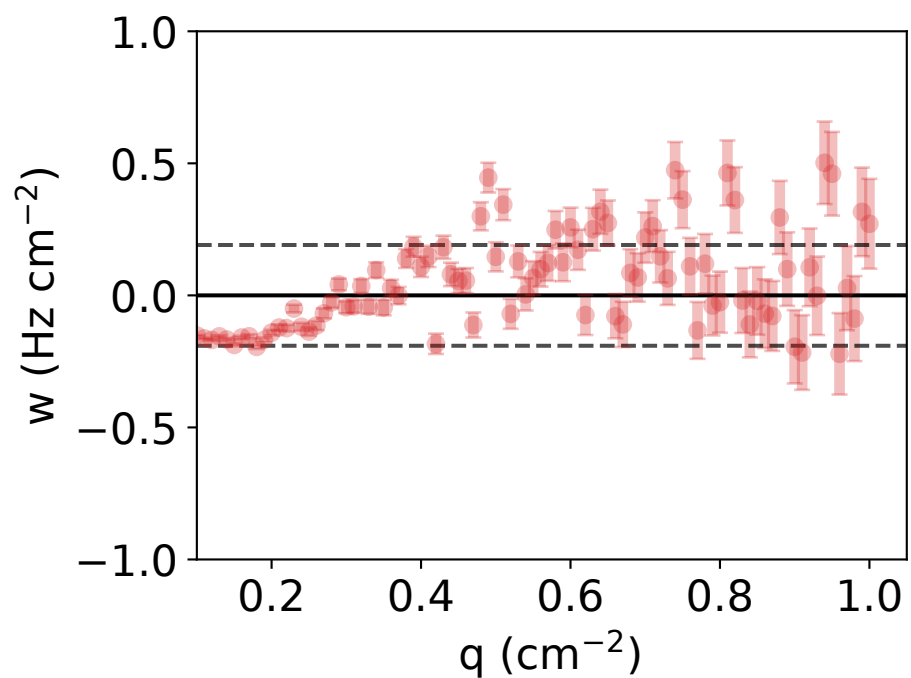
$\nu = 1.648 \pm 0.009$, $M = 16.902 \pm 0.429$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.193 Hz/cm²



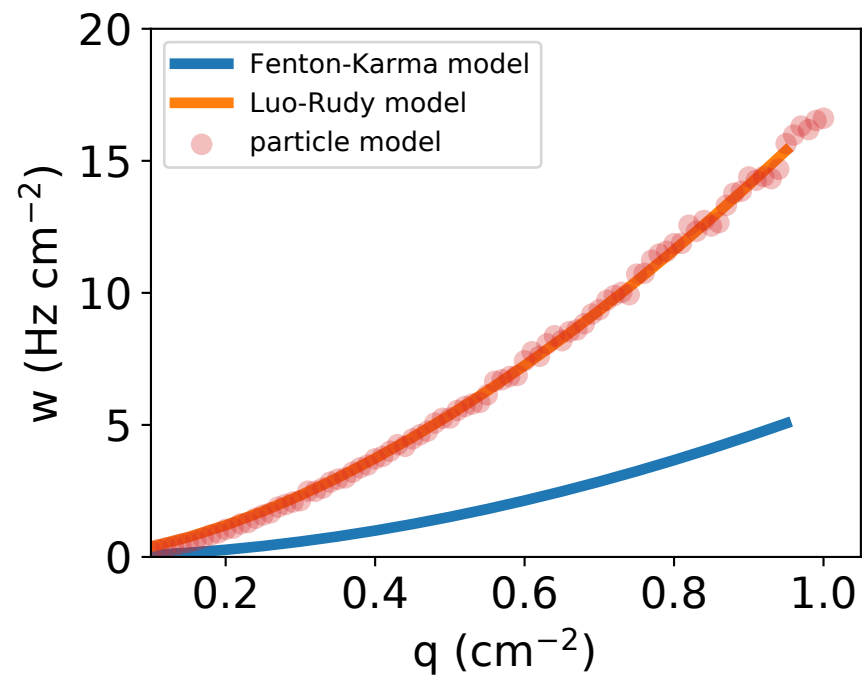
force_code=2, neighbors=0, reflect=0
 $r = 0.09776$ cm, $\kappa = 722.28900$ Hz
 $D = 0.64572$ cm²/s, $a = 6.44002$ cm²/s, $x_0 = 0$ cm



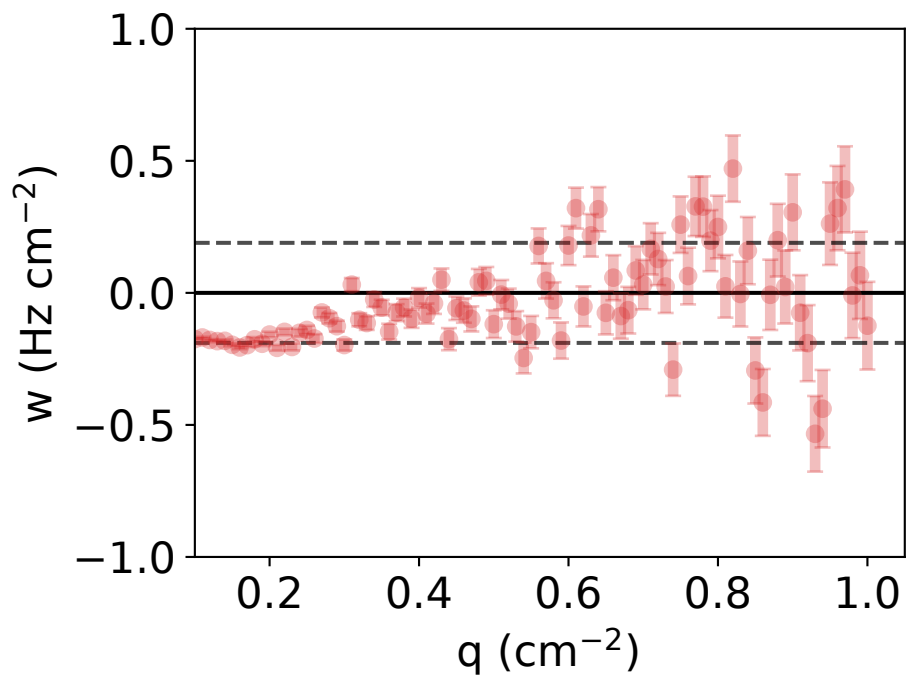
$\nu = 1.774 \pm 0.024$, $M = 16.684 \pm 0.985$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.191 Hz/cm²



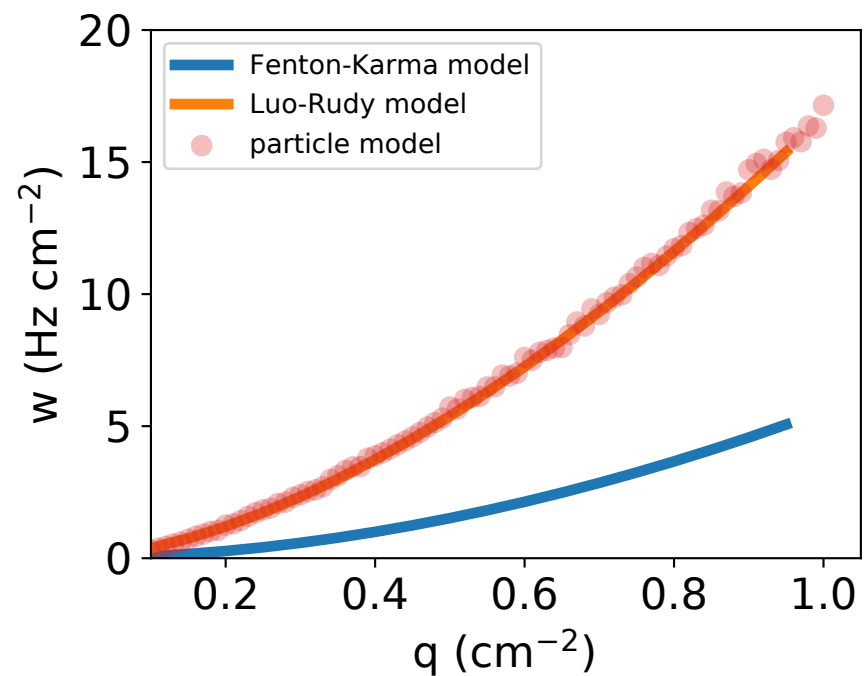
force_code=2, neighbors=0, reflect=0
 $r = 0.10127$ cm, $\kappa = 695.68300$ Hz
 $D = 0.63094$ cm²/s, $a = 6.23816$ cm²/s, $x_0 = 0$ cm



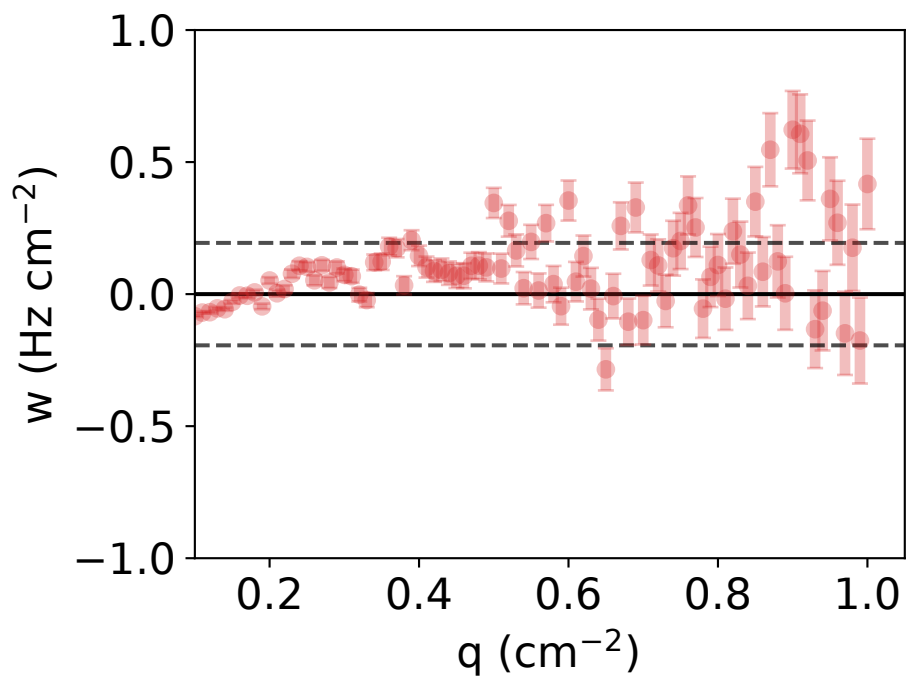
$\nu = 1.798 \pm 0.023$, $M = 16.701 \pm 0.929$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.189 Hz/cm²



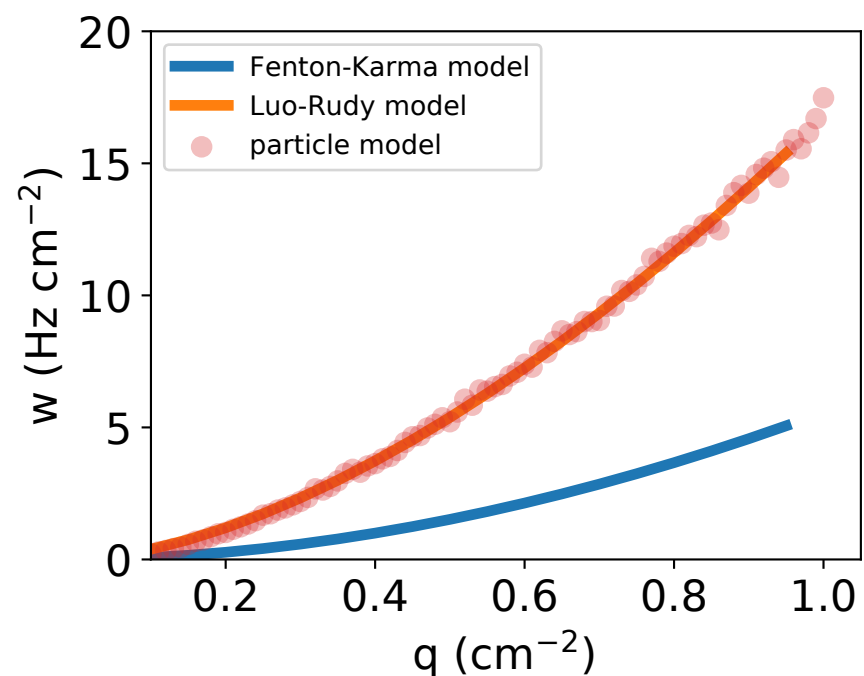
force_code=2, neighbors=0, reflect=0
 $r = 0.17743$ cm, $\kappa = 259.85700$ Hz
 $D = 0.31971$ cm²/s, $a = 9.69271$ cm²/s, $x_0 = 0$ cm



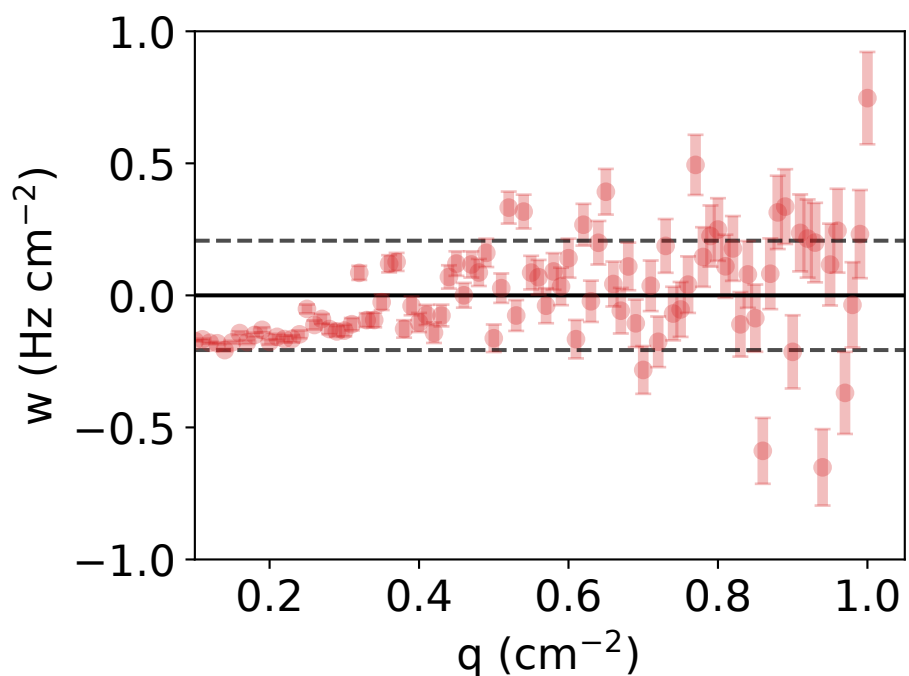
$\nu = 1.670 \pm 0.014$, $M = 16.792 \pm 0.589$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.194 Hz/cm²



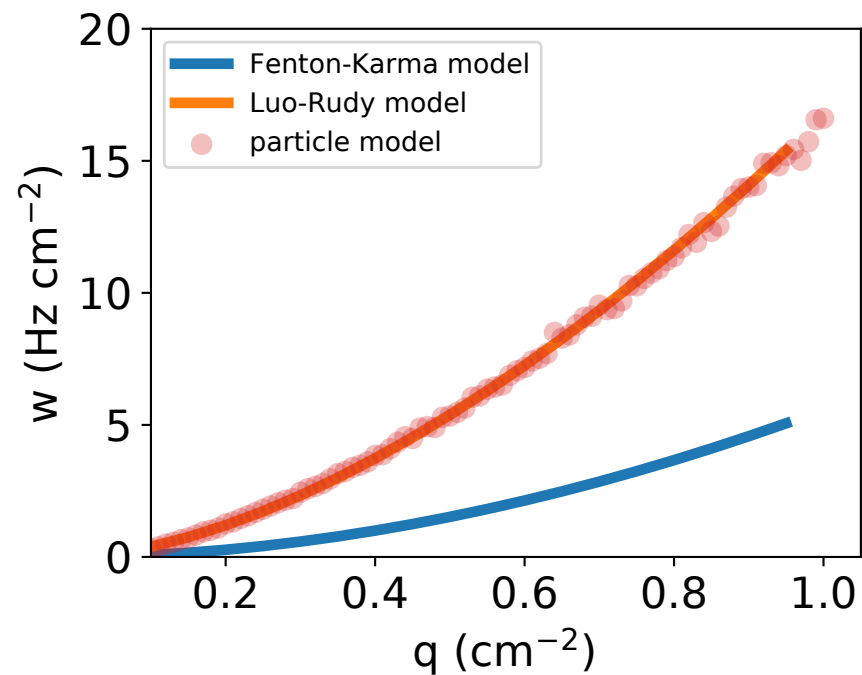
force_code=2, neighbors=0, reflect=0
 $r = 0.10054$ cm, $\kappa = 702.27200$ Hz
 $D = 0.63384$ cm²/s, $a = 6.31125$ cm²/s, $x_0 = 0$ cm



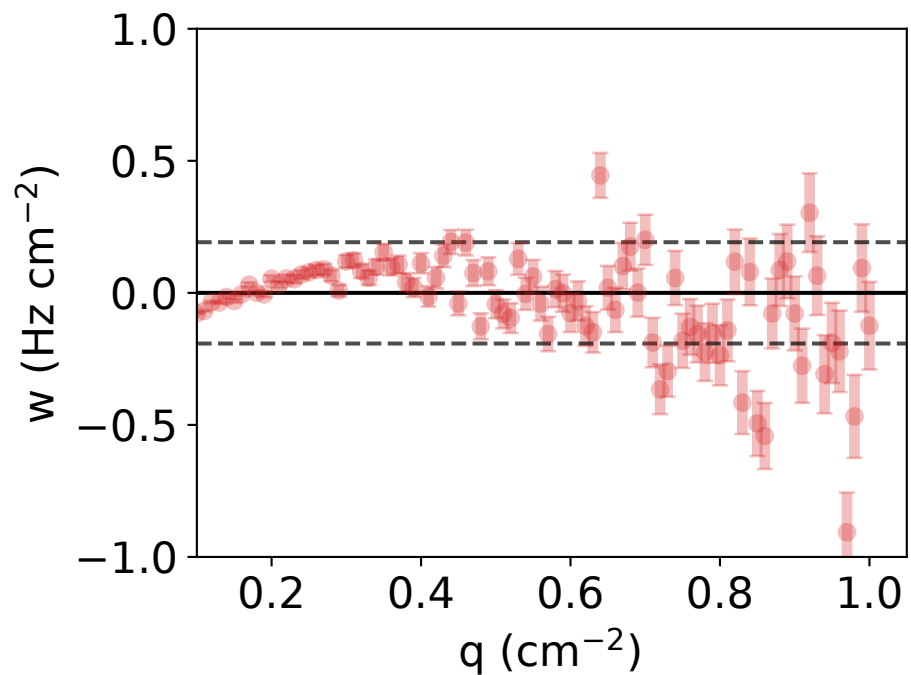
$\nu = 1.789 \pm 0.024$, $M = 16.686 \pm 0.993$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.207 Hz/cm²



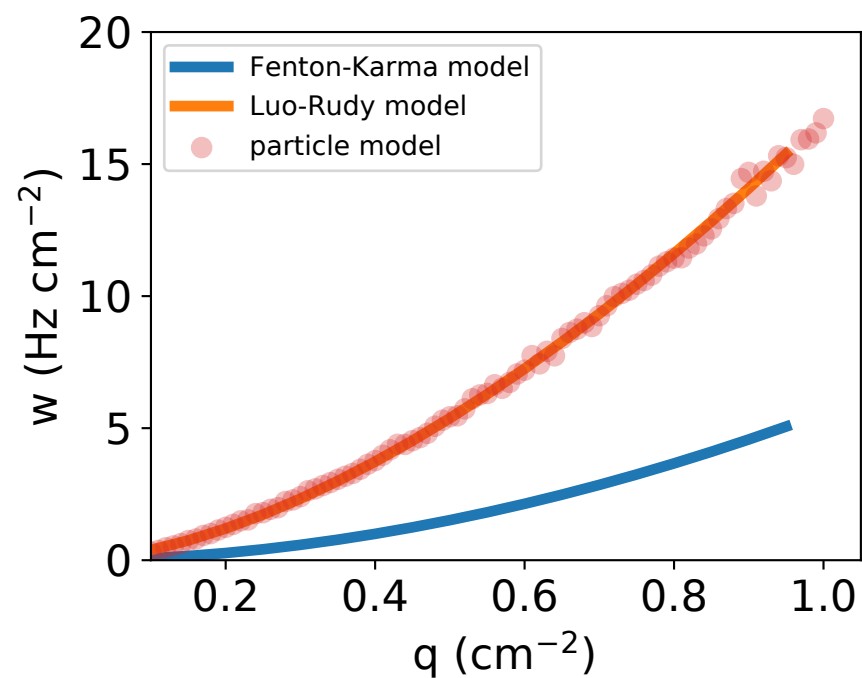
force_code=2, neighbors=0, reflect=0
 $r = 0.17633$ cm, $\kappa = 252.65600$ Hz
 $D = 0.18938$ cm²/s, $a = 10.18260$ cm²/s, $x_0 = 0$ cm



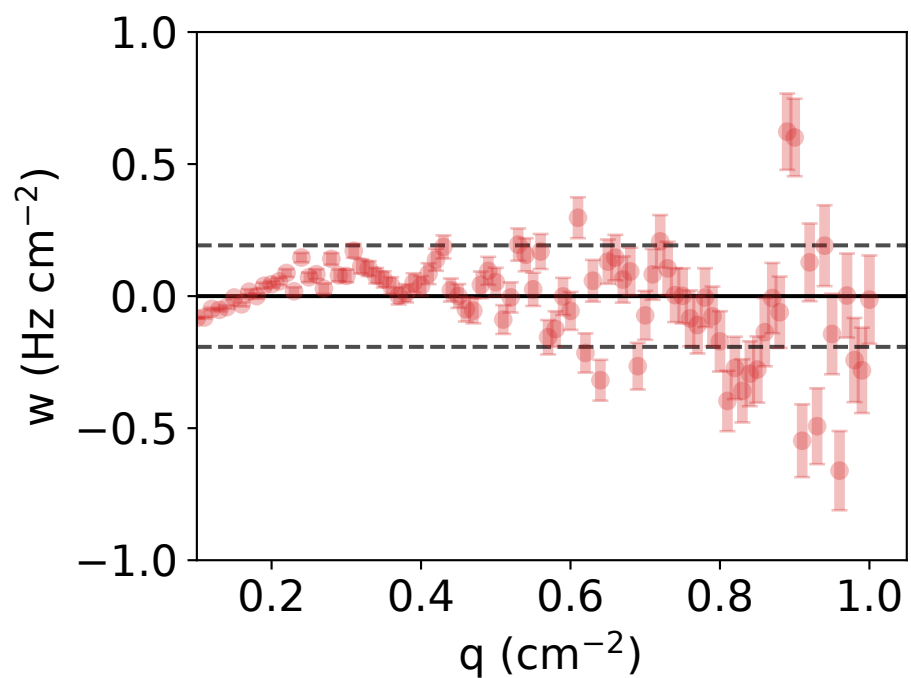
$\nu = 1.645 \pm 0.014$, $M = 16.350 \pm 0.565$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.192 Hz/cm²



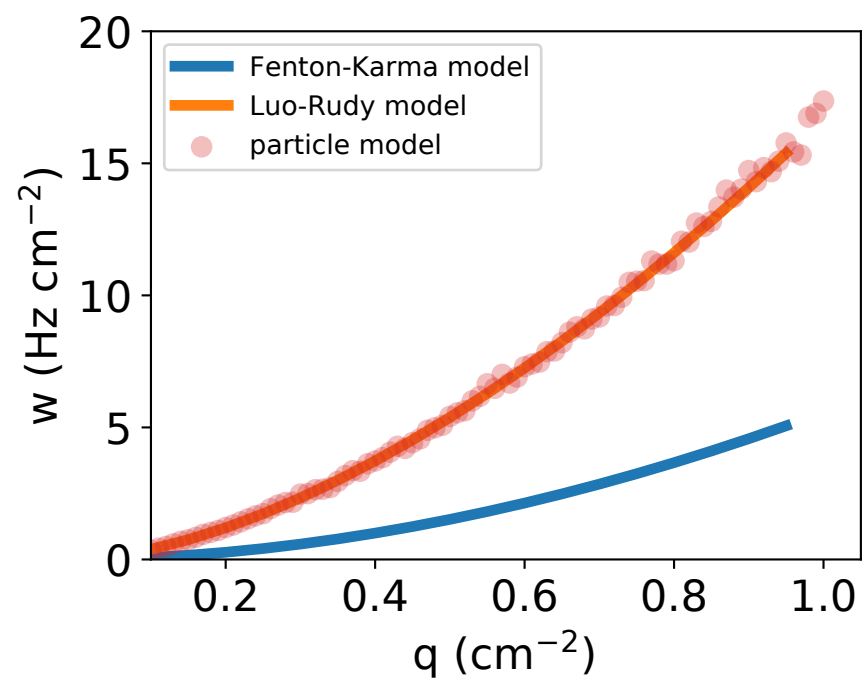
force_code=2, neighbors=0, reflect=0
 $r = 0.17791$ cm, $\kappa = 250.00000$ Hz
 $D = 0.31920$ cm²/s, $a = 10.01620$ cm²/s, $x_0 = 0$ cm



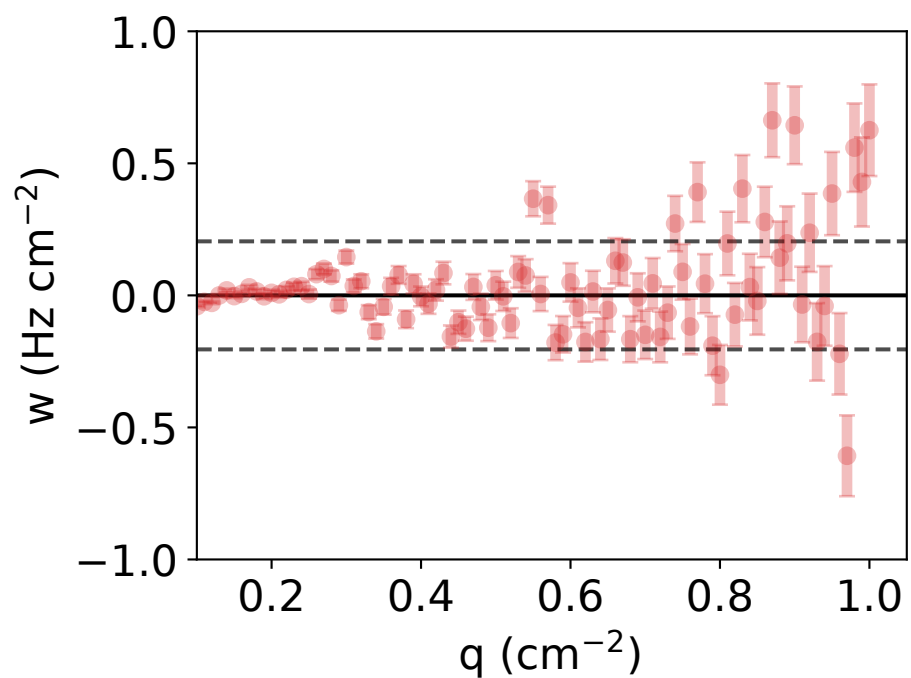
$\nu = 1.652 \pm 0.015$, $M = 16.420 \pm 0.628$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.192 Hz/cm²



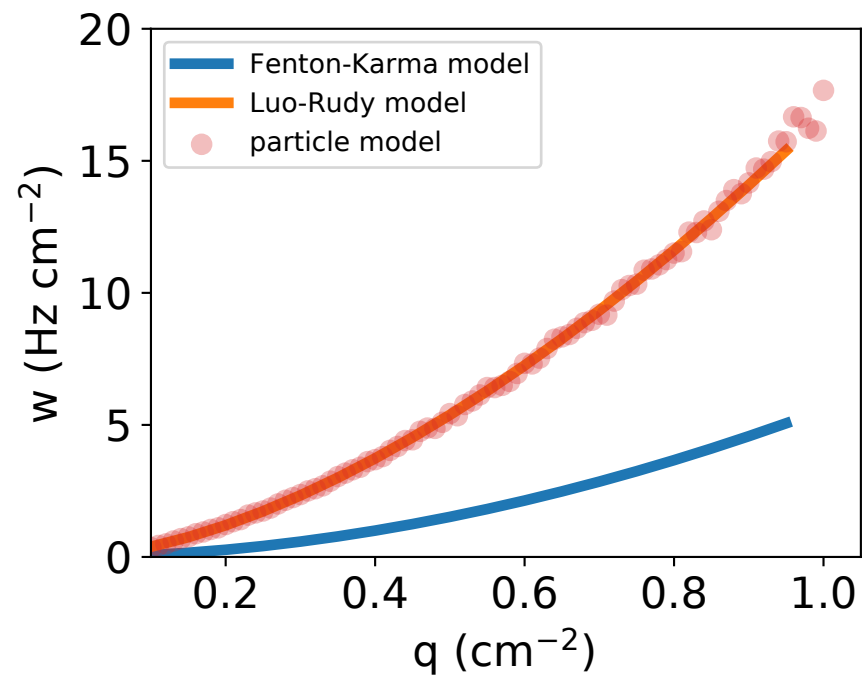
force_code=2, neighbors=0, reflect=0
 $r = 0.30392$ cm, $\kappa = 102.43400$ Hz
 $D = 0.69878$ cm²/s, $a = 13.71870$ cm²/s, $x_0 = 0$ cm



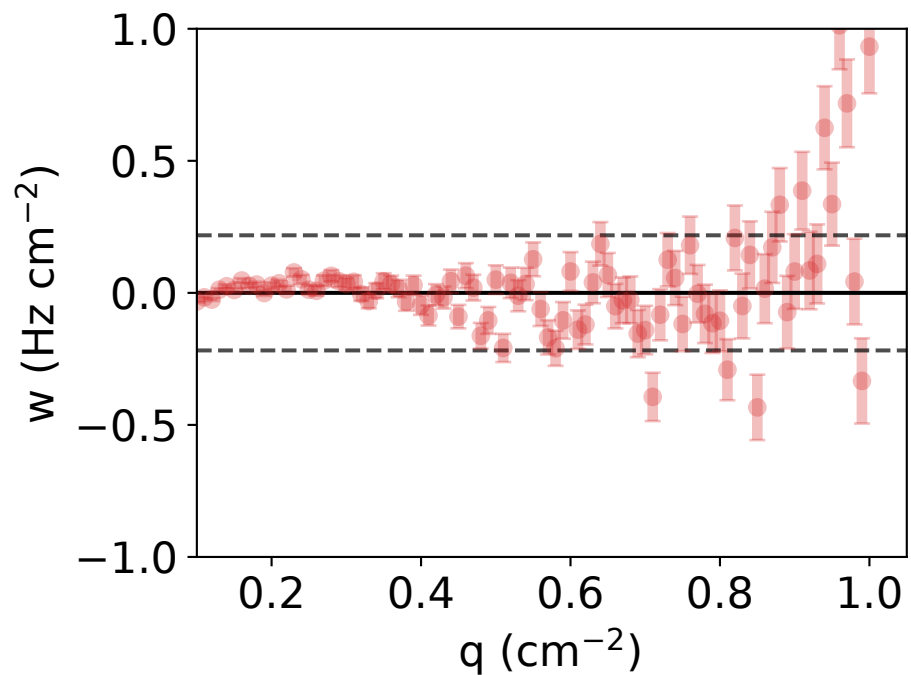
$\nu = 1.646 \pm 0.009$, $M = 16.876 \pm 0.454$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.205 Hz/cm²



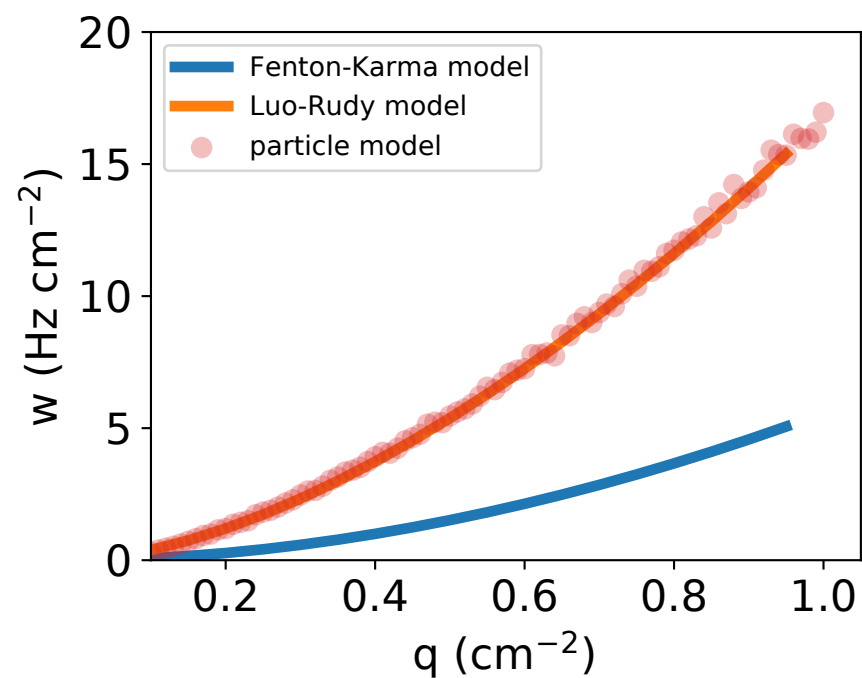
force_code=2, neighbors=0, reflect=0
 $r = 0.30551$ cm, $\kappa = 100.00000$ Hz
 $D = 0.44058$ cm²/s, $a = 14.11220$ cm²/s, $x_0 = 0$ cm



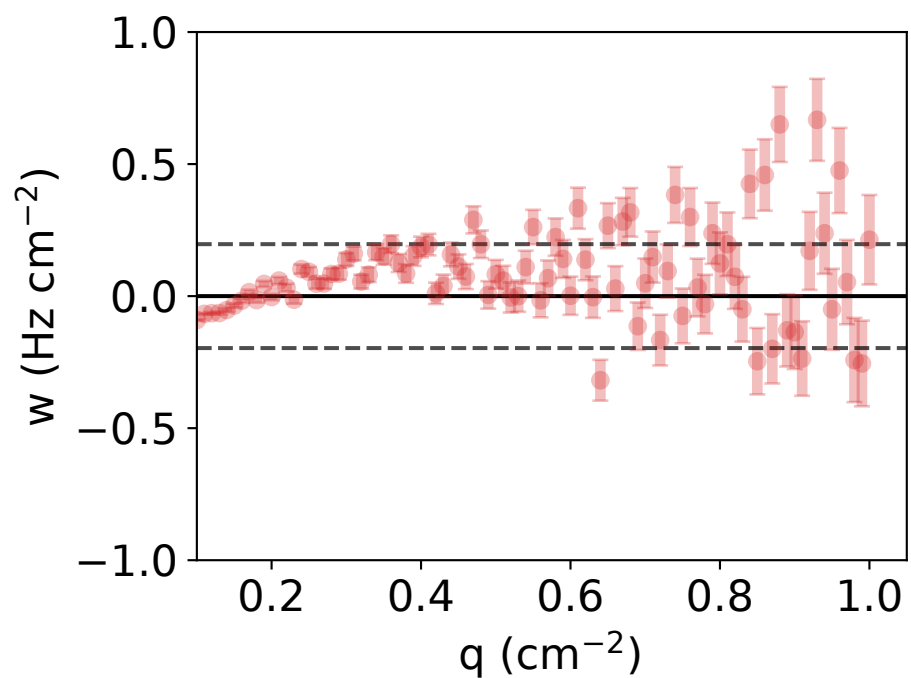
$\nu = 1.638 \pm 0.008$, $M = 16.917 \pm 0.433$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.218 Hz/cm²



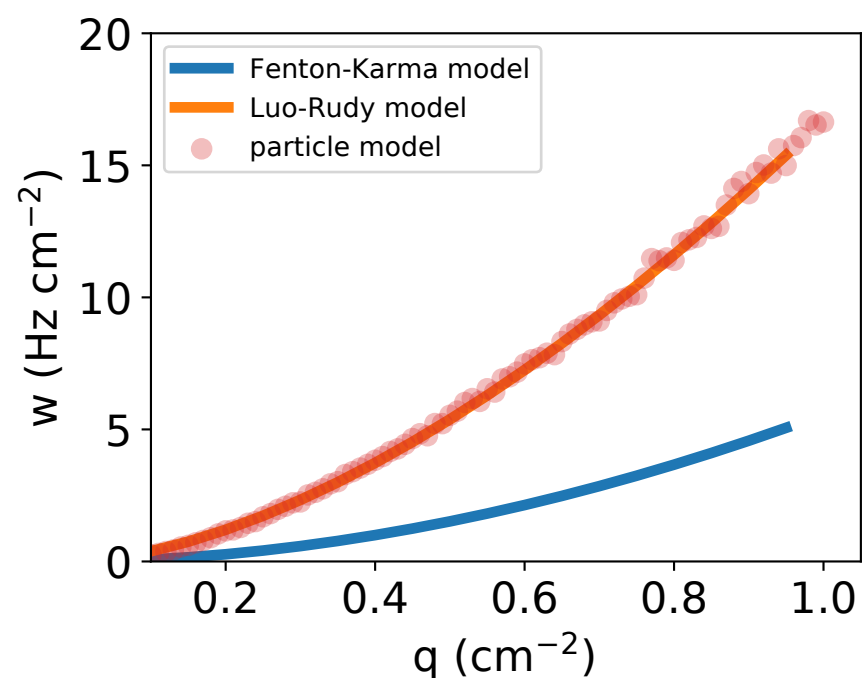
force_code=2, neighbors=0, reflect=0
 $r = 0.18768$ cm, $\kappa = 240.34600$ Hz
 $D = 0.57310$ cm²/s, $a = 9.73734$ cm²/s, $x_0 = 0$ cm



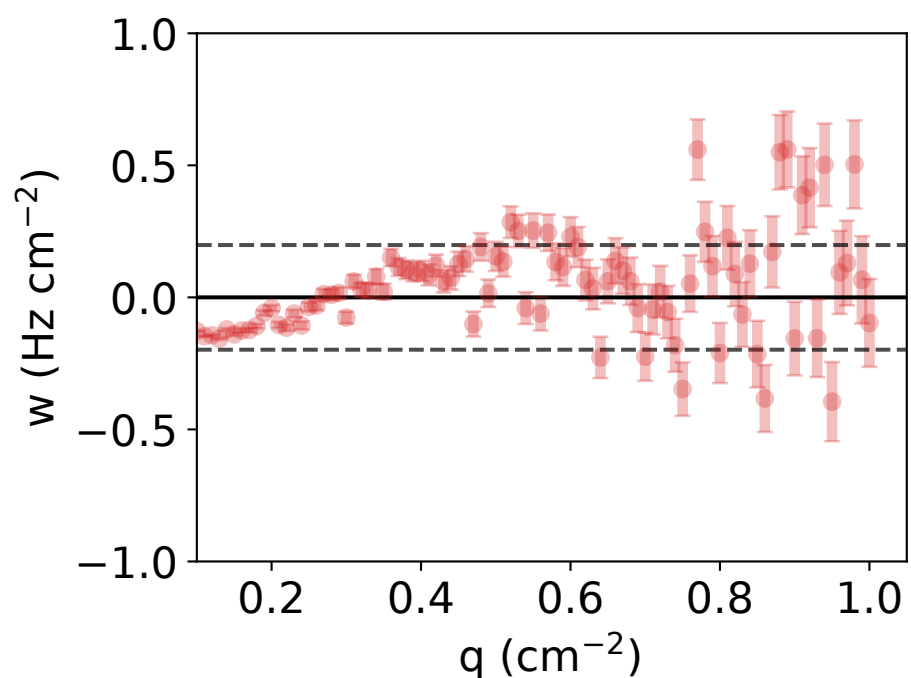
$\nu = 1.667 \pm 0.015$, $M = 16.677 \pm 0.637$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.197 Hz/cm²



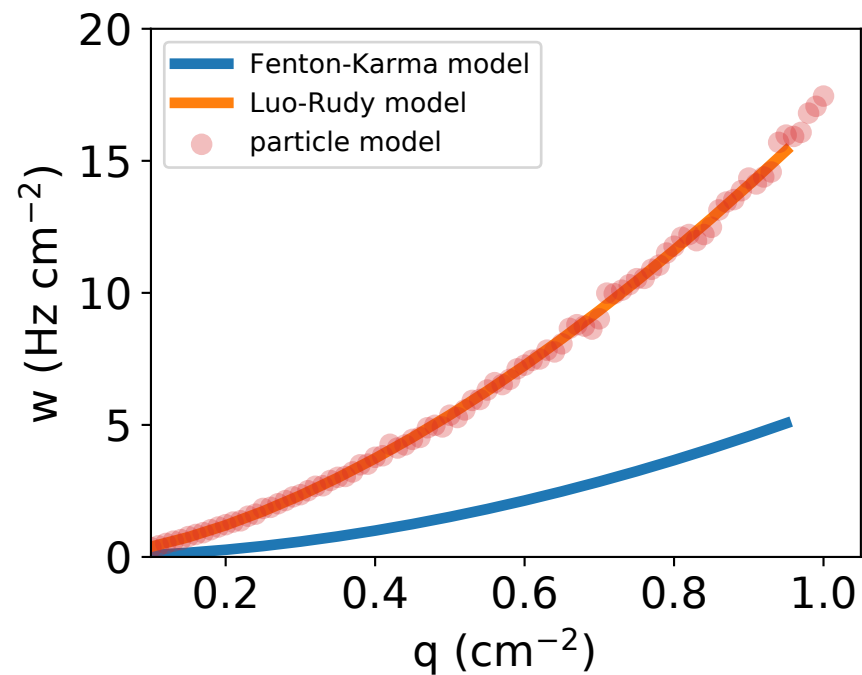
force_code=2, neighbors=0, reflect=0
 $r = 0.10891$ cm, $\kappa = 604.19500$ Hz
 $D = 0.15594$ cm²/s, $a = 7.09992$ cm²/s, $x_0 = 0$ cm



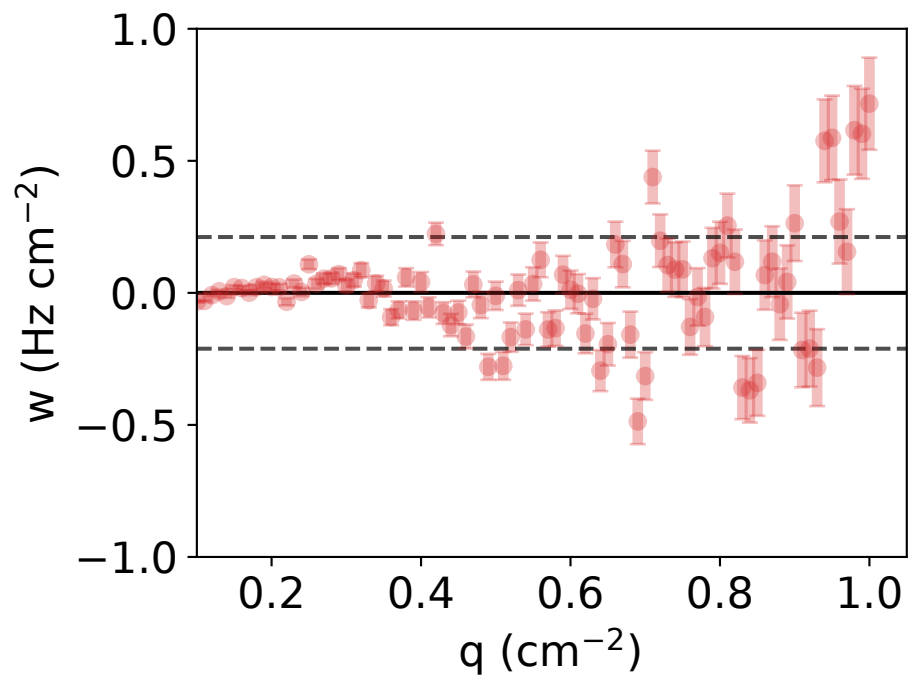
$\nu = 1.740 \pm 0.021$, $M = 16.656 \pm 0.874$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.198 Hz/cm²



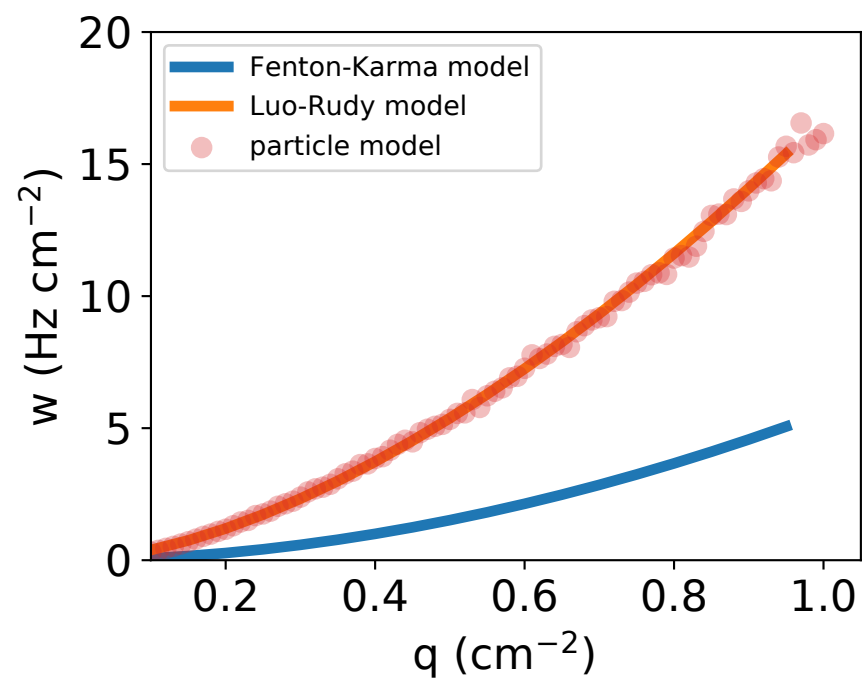
force_code=2, neighbors=0, reflect=0
 $r = 0.30224$ cm, $\kappa = 100.00000$ Hz
 $D = 0.12751$ cm²/s, $a = 14.79580$ cm²/s, $x_0 = 0$ cm



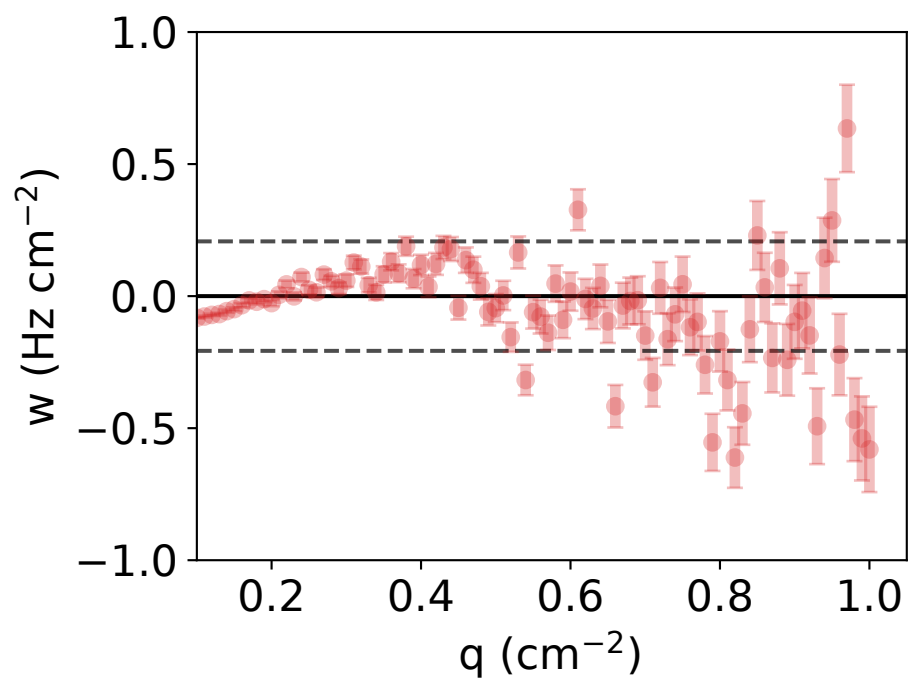
$\nu = 1.641 \pm 0.009$, $M = 16.873 \pm 0.469$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.211 Hz/cm²



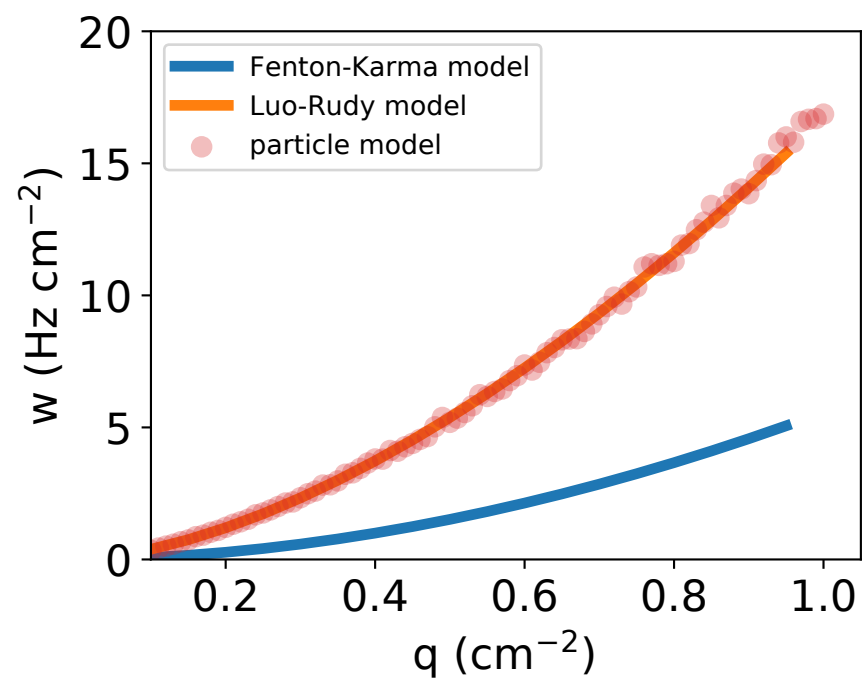
force_code=2, neighbors=0, reflect=0
 $r = 0.16460$ cm, $\kappa = 283.27000$ Hz
 $D = 0.21331$ cm²/s, $a = 9.45583$ cm²/s, $x_0 = 0$ cm



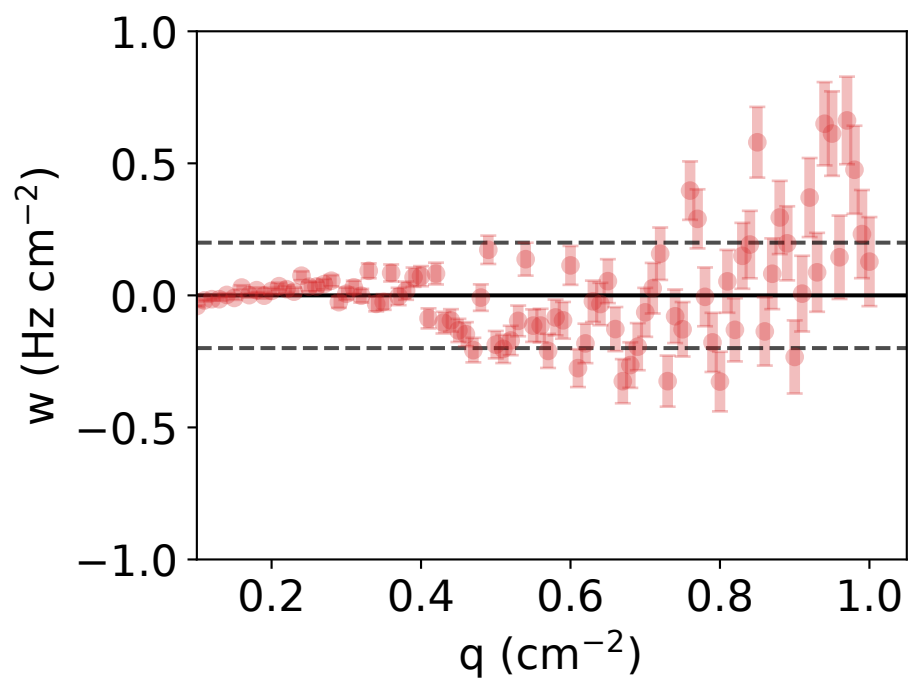
$\nu = 1.663 \pm 0.015$, $M = 16.343 \pm 0.622$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.207 Hz/cm²



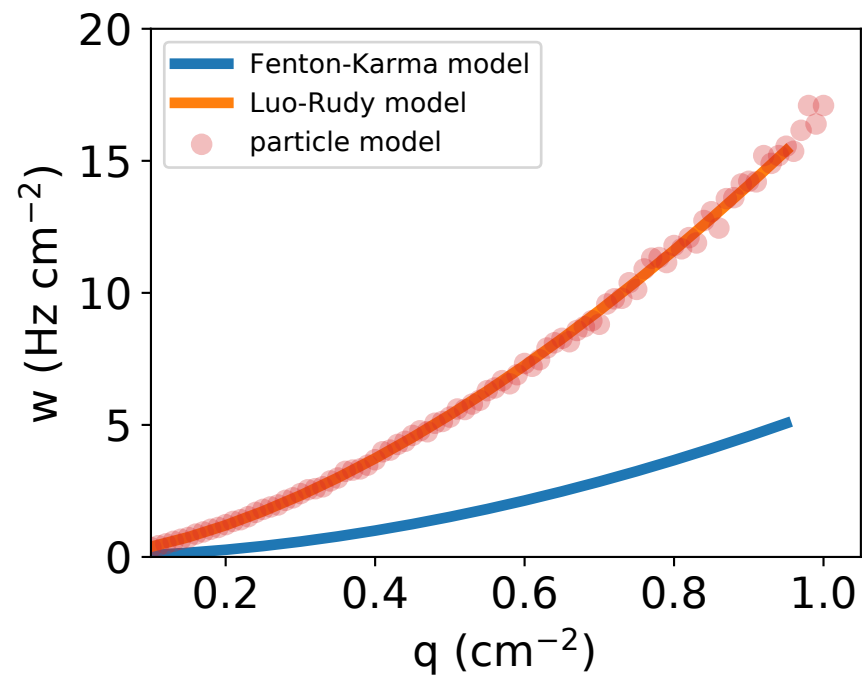
force_code=2, neighbors=0, reflect=0
 $r = 0.30141$ cm, $\kappa = 101.75300$ Hz
 $D = 0.79766$ cm²/s, $a = 14.00260$ cm²/s, $x_0 = 0$ cm



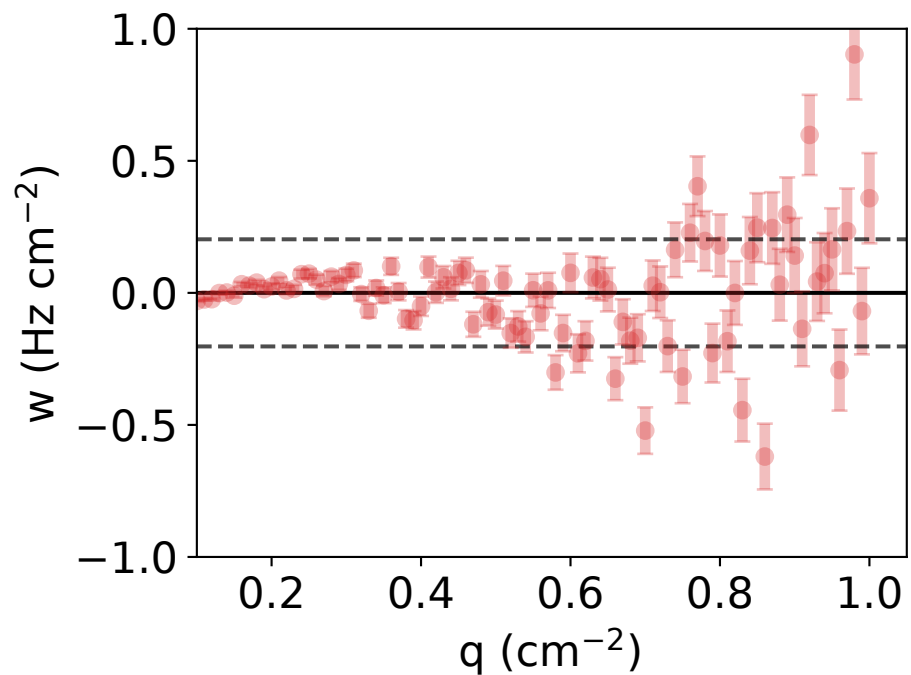
$\nu = 1.645 \pm 0.009$, $M = 16.920 \pm 0.439$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.200 Hz/cm²



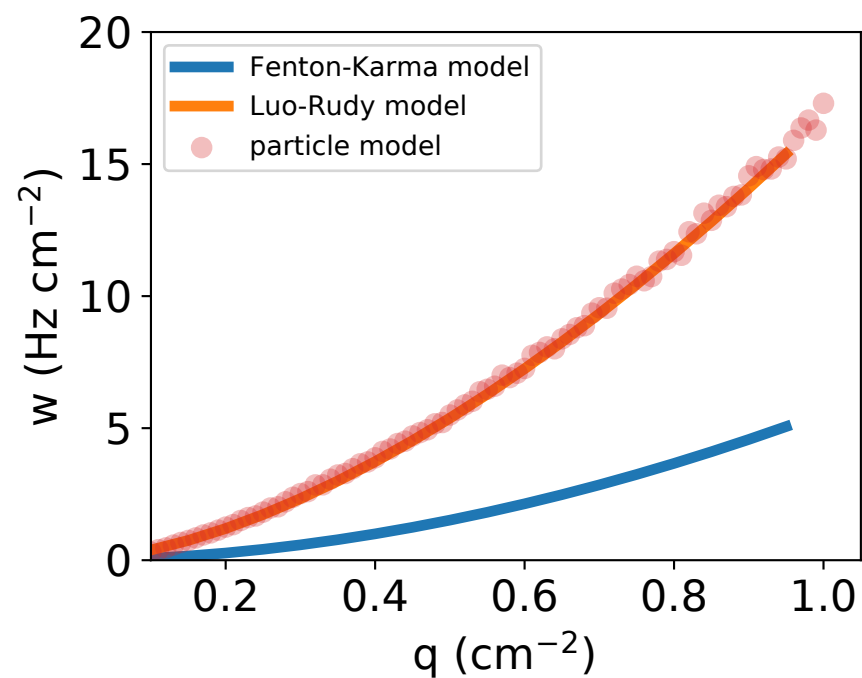
force_code=2, neighbors=0, reflect=0
 $r = 0.30303$ cm, $\kappa = 100.00000$ Hz
 $D = 0.56257$ cm²/s, $a = 14.13430$ cm²/s, $x_0 = 0$ cm



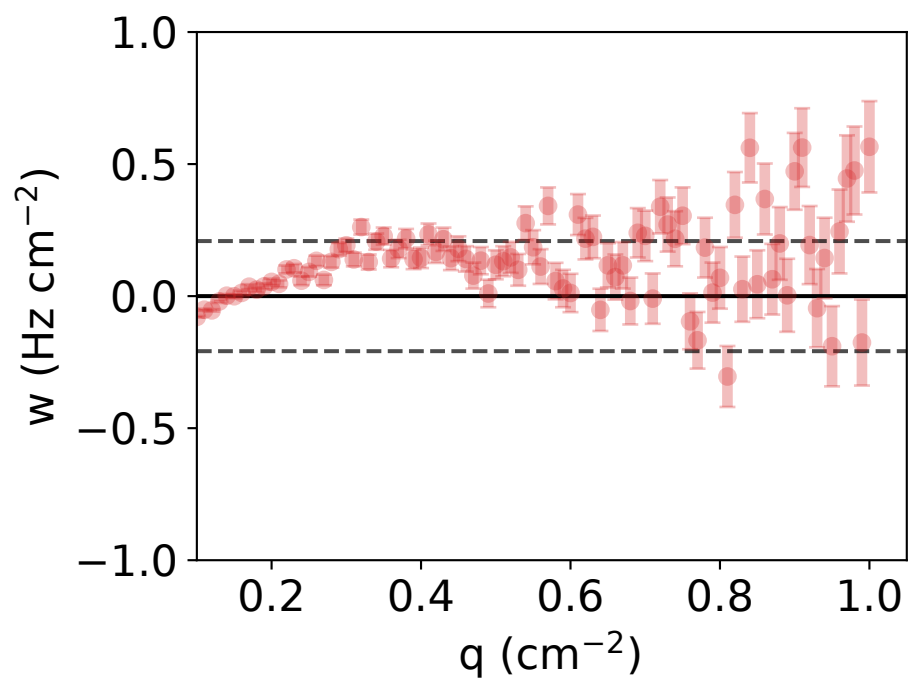
$\nu = 1.638 \pm 0.009$, $M = 16.788 \pm 0.451$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.203 Hz/cm²



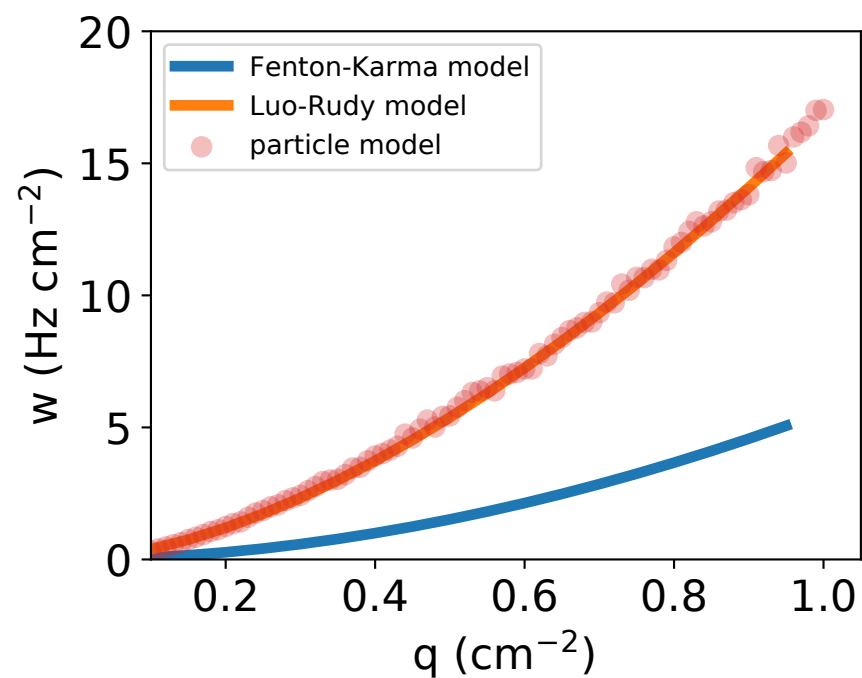
force_code=2, neighbors=0, reflect=0
 $r = 0.18412$ cm, $\kappa = 242.37500$ Hz
 $D = 0.63050$ cm²/s, $a = 10.30820$ cm²/s, $x_0 = 0$ cm



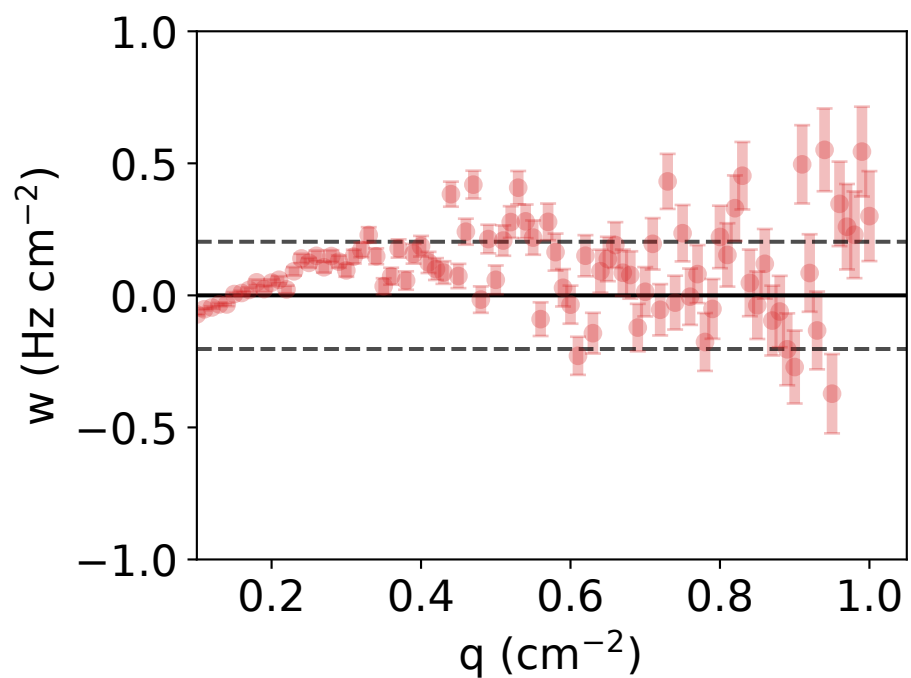
$\nu = 1.648 \pm 0.014$, $M = 16.760 \pm 0.584$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.208 Hz/cm²



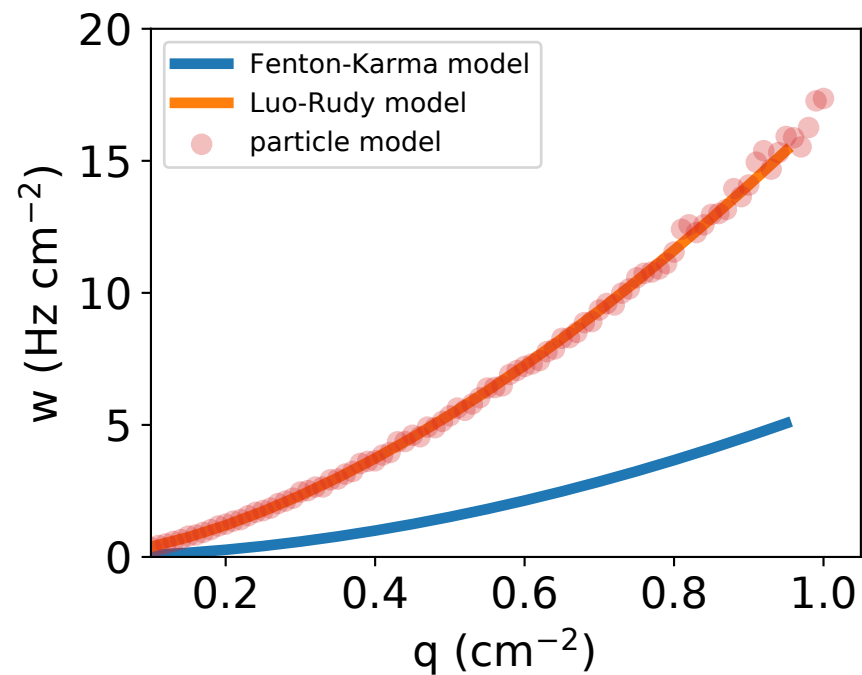
force_code=2, neighbors=0, reflect=0
 $r = 0.19067$ cm, $\kappa = 229.03200$ Hz
 $D = 0.61613$ cm²/s, $a = 10.45350$ cm²/s, $x_0 = 0$ cm



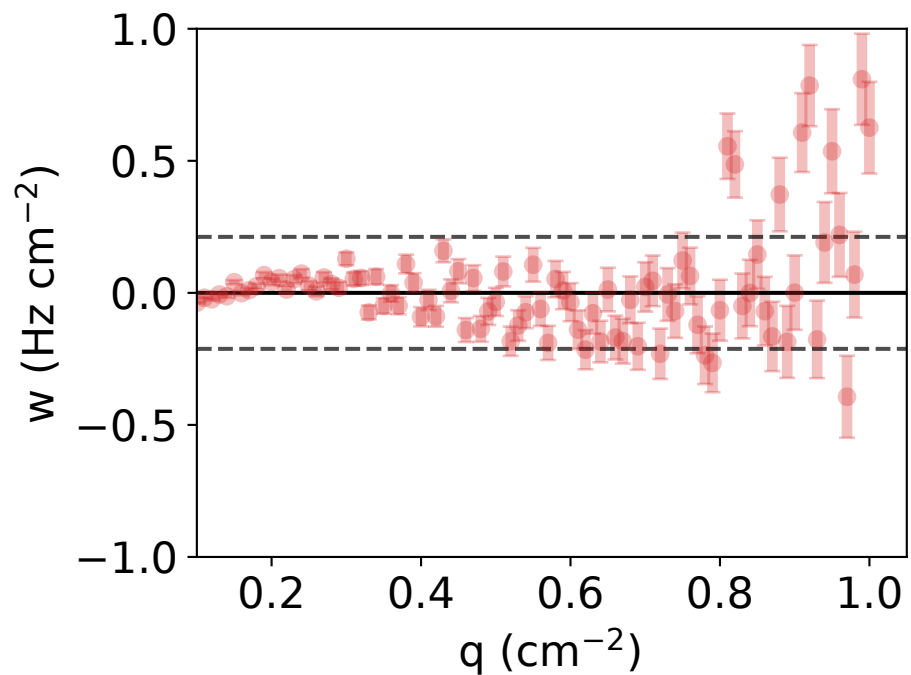
$\nu = 1.648 \pm 0.014$, $M = 16.682 \pm 0.609$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.203 Hz/cm²



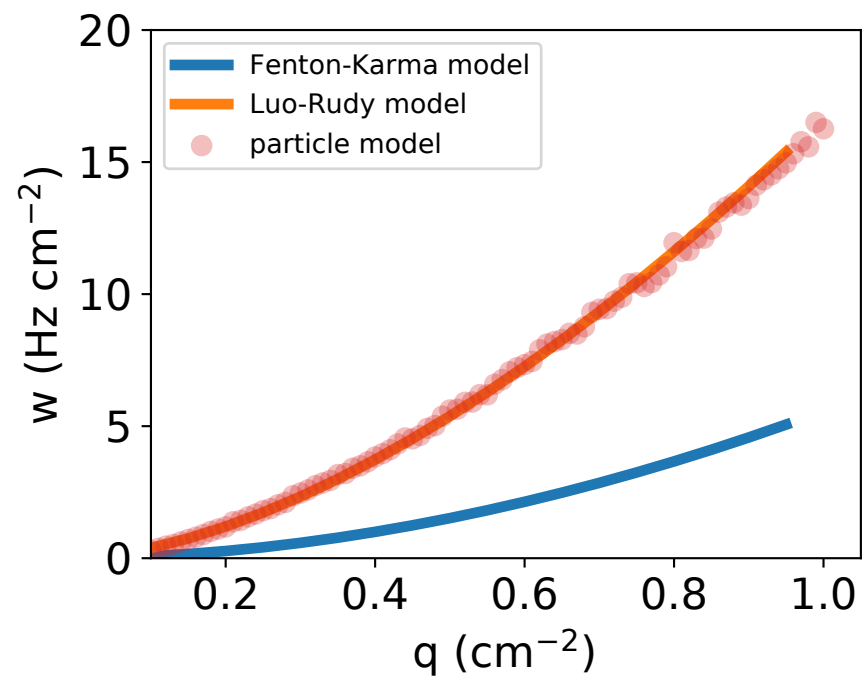
force_code=2, neighbors=0, reflect=0
 $r = 0.30085$ cm, $\kappa = 101.68700$ Hz
 $D = 0.79578$ cm²/s, $a = 13.96690$ cm²/s, $x_0 = 0$ cm



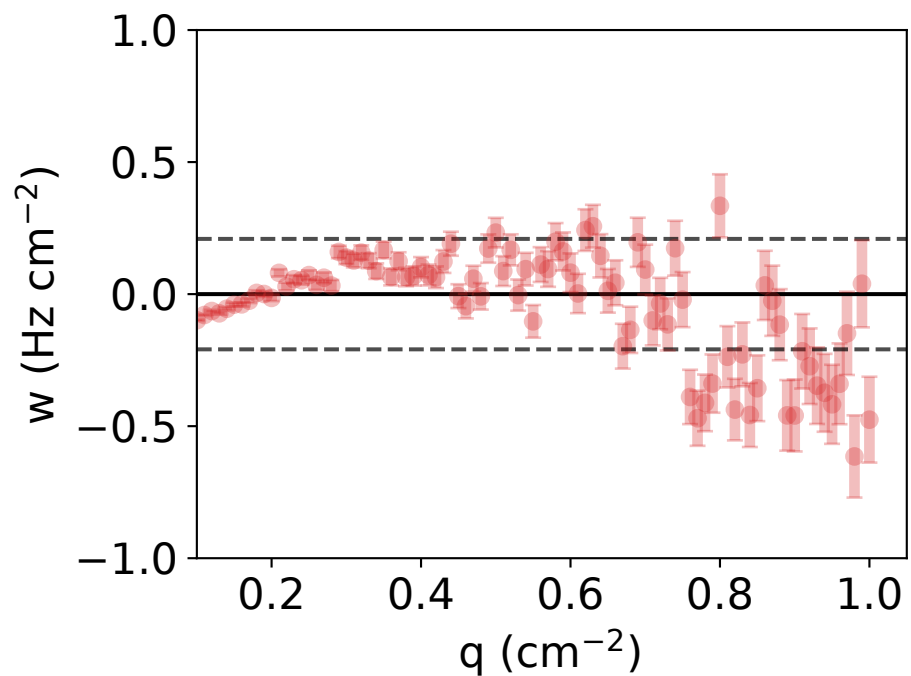
$\nu = 1.640 \pm 0.009$, $M = 16.878 \pm 0.461$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.212 Hz/cm²



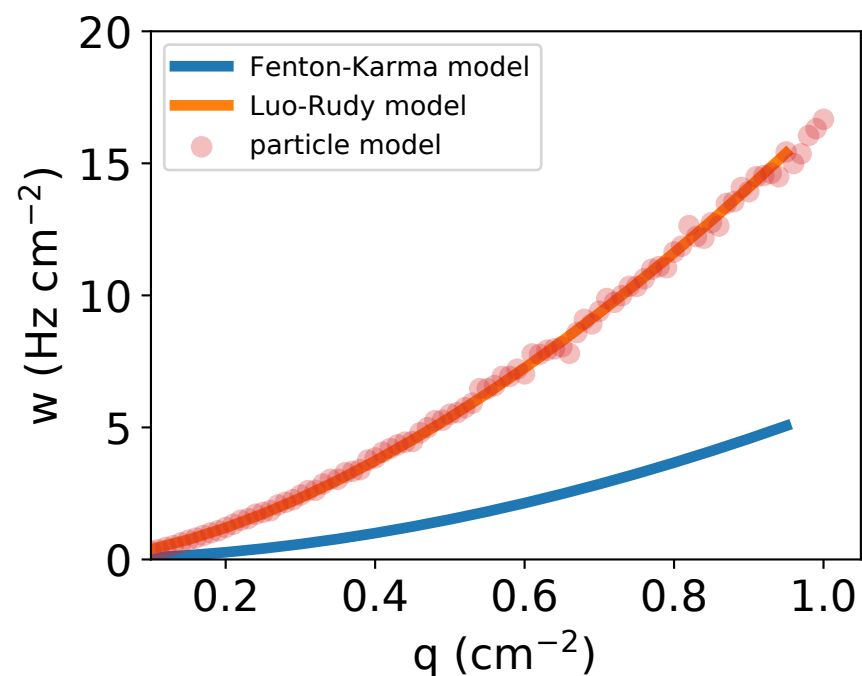
force_code=2, neighbors=0, reflect=0
 $r = 0.16199$ cm, $\kappa = 288.33600$ Hz
 $D = 0.68834$ cm²/s, $a = 9.37306$ cm²/s, $x_0 = 0$ cm



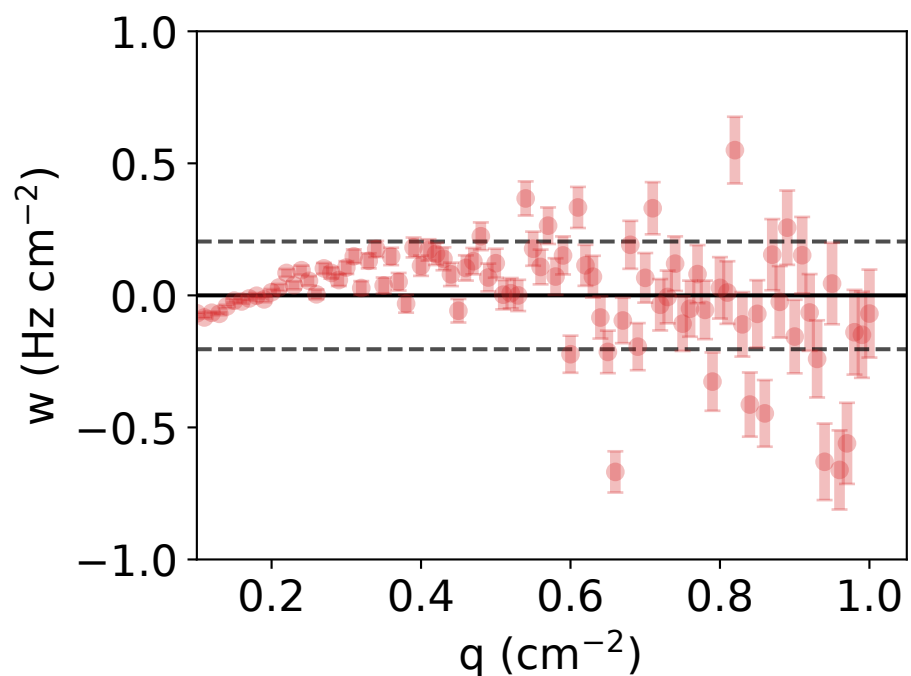
$\nu = 1.659 \pm 0.017$, $M = 16.184 \pm 0.680$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.209 Hz/cm²



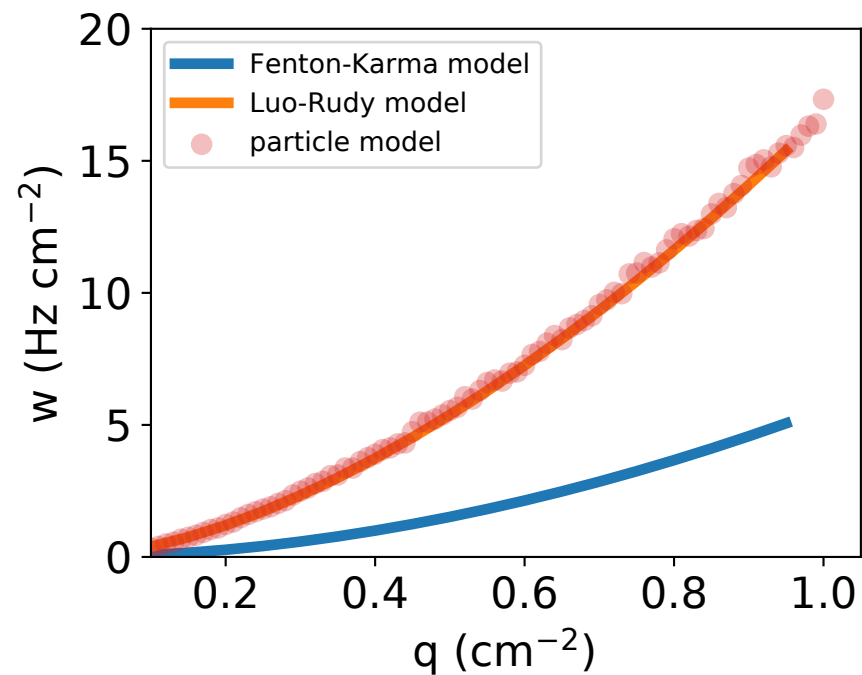
force_code=2, neighbors=0, reflect=0
 $r = 0.16888$ cm, $\kappa = 274.91500$ Hz
 $D = 0.20000$ cm²/s, $a = 9.76342$ cm²/s, $x_0 = 0$ cm



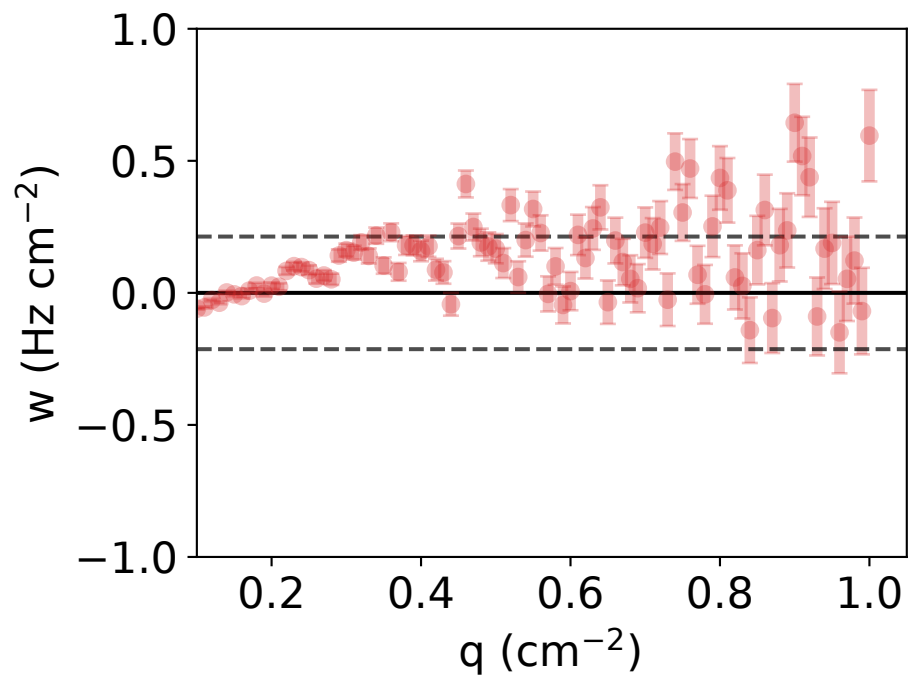
$\nu = 1.657 \pm 0.015$, $M = 16.380 \pm 0.648$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.204 Hz/cm²



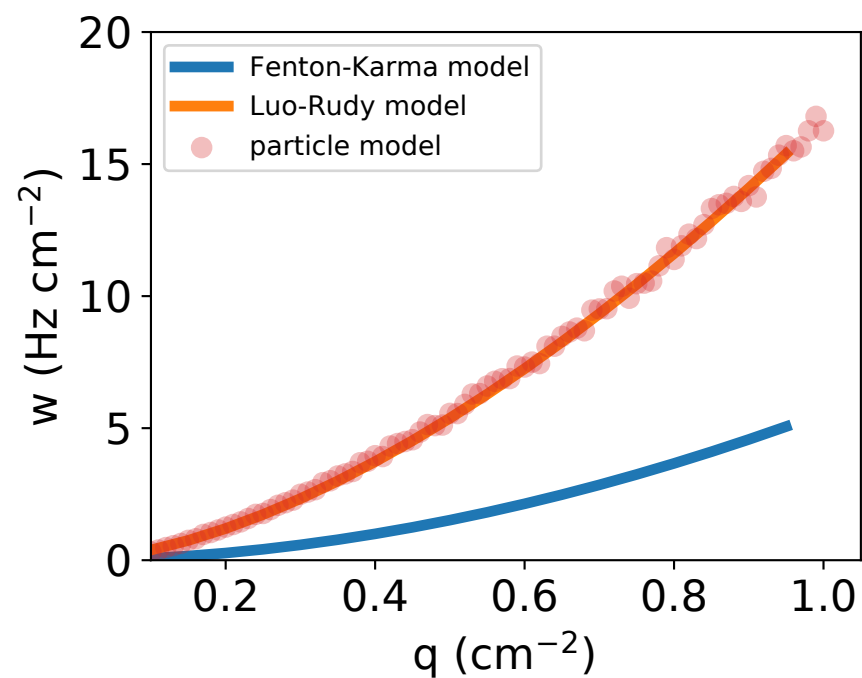
force_code=2, neighbors=0, reflect=0
 $r = 0.20007$ cm, $\kappa = 212.62000$ Hz
 $D = 0.55048$ cm²/s, $a = 10.54750$ cm²/s, $x_0 = 0$ cm



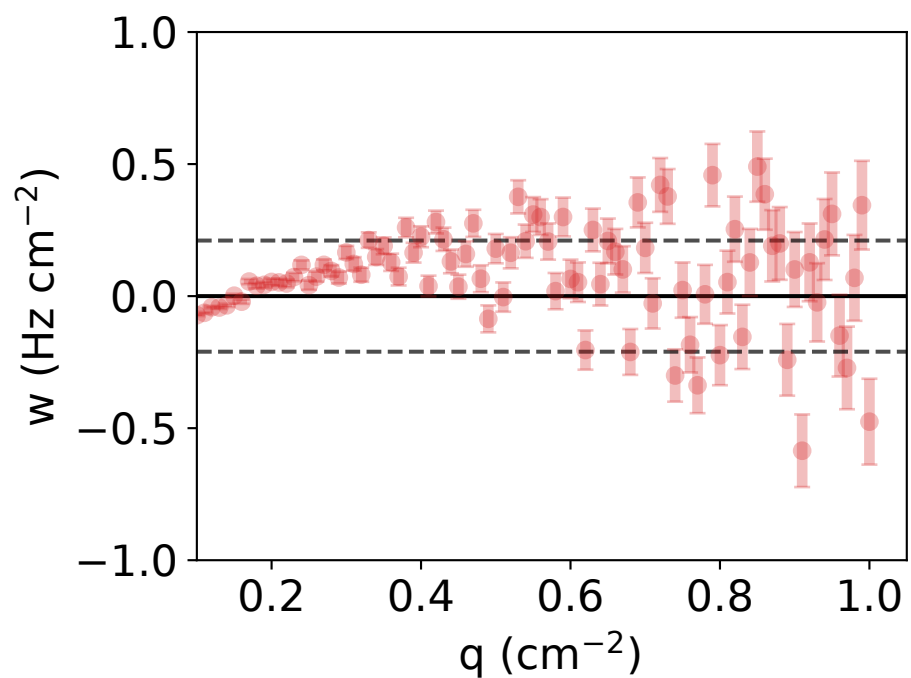
$\nu = 1.652 \pm 0.012$, $M = 16.805 \pm 0.526$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.213 Hz/cm²



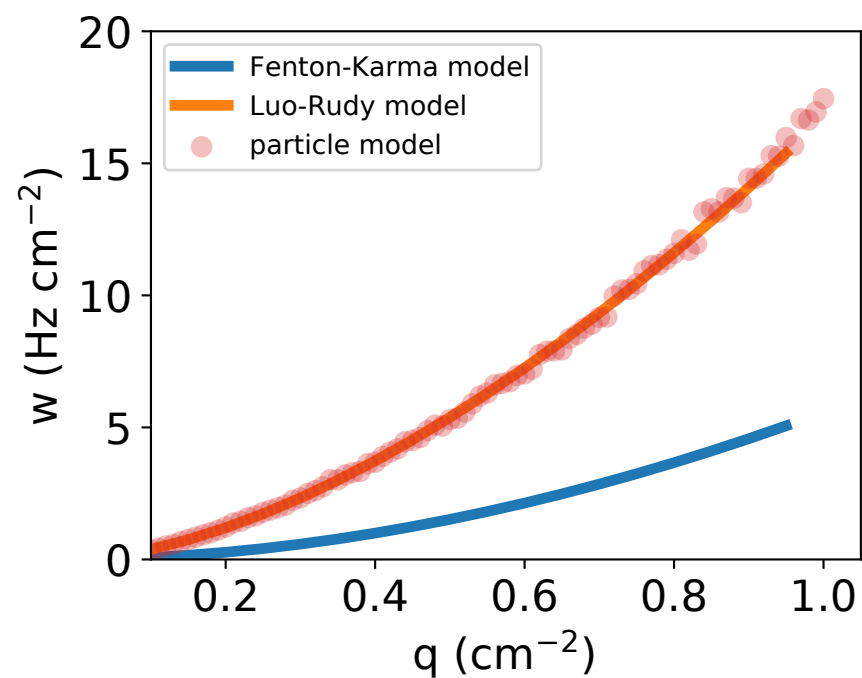
force_code=2, neighbors=0, reflect=0
 $r = 0.17861$ cm, $\kappa = 251.69200$ Hz
 $D = 0.31015$ cm²/s, $a = 10.14130$ cm²/s, $x_0 = 0$ cm



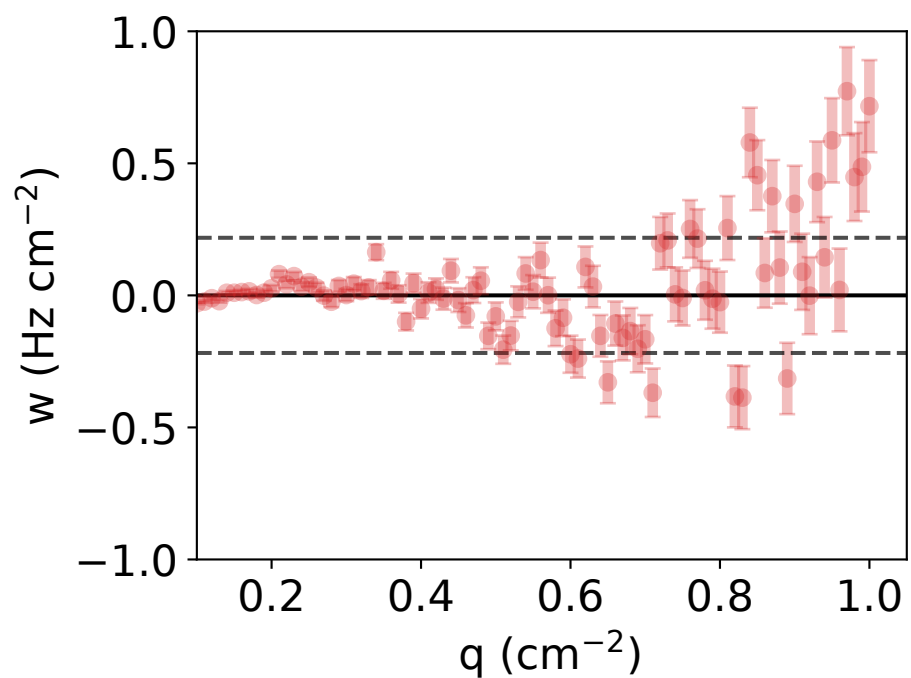
$\nu = 1.649 \pm 0.015$, $M = 16.572 \pm 0.633$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.210 Hz/cm²



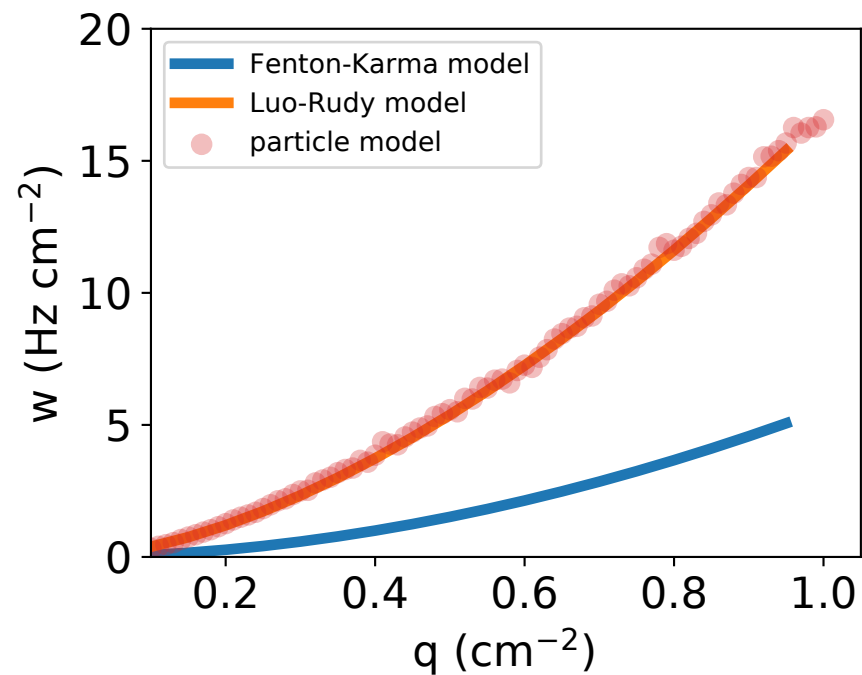
force_code=2, neighbors=0, reflect=0
 $r = 0.30656$ cm, $\kappa = 100.00000$ Hz
 $D = 0.70000$ cm²/s, $a = 13.86760$ cm²/s, $x_0 = 0$ cm



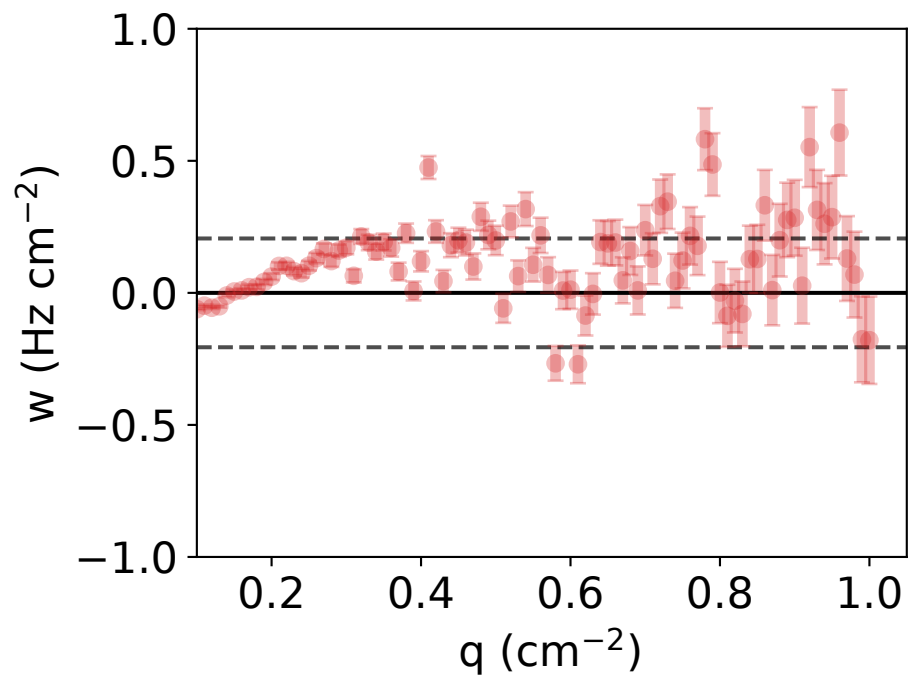
$\nu = 1.643 \pm 0.009$, $M = 16.958 \pm 0.441$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.218 Hz/cm²



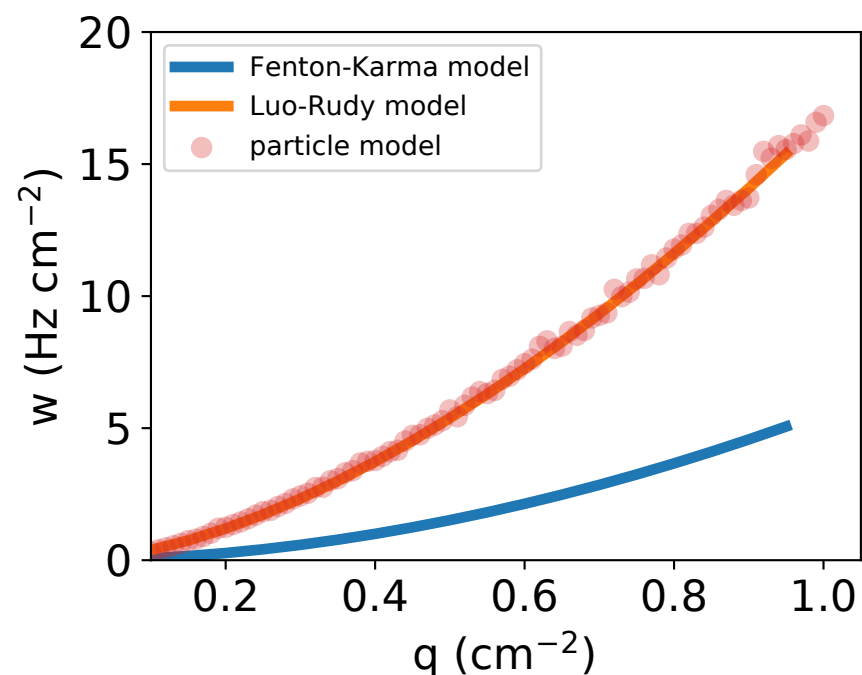
force_code=2, neighbors=0, reflect=0
 $r = 0.20696$ cm, $\kappa = 200.00000$ Hz
 $D = 0.36021$ cm²/s, $a = 11.02320$ cm²/s, $x_0 = 0$ cm



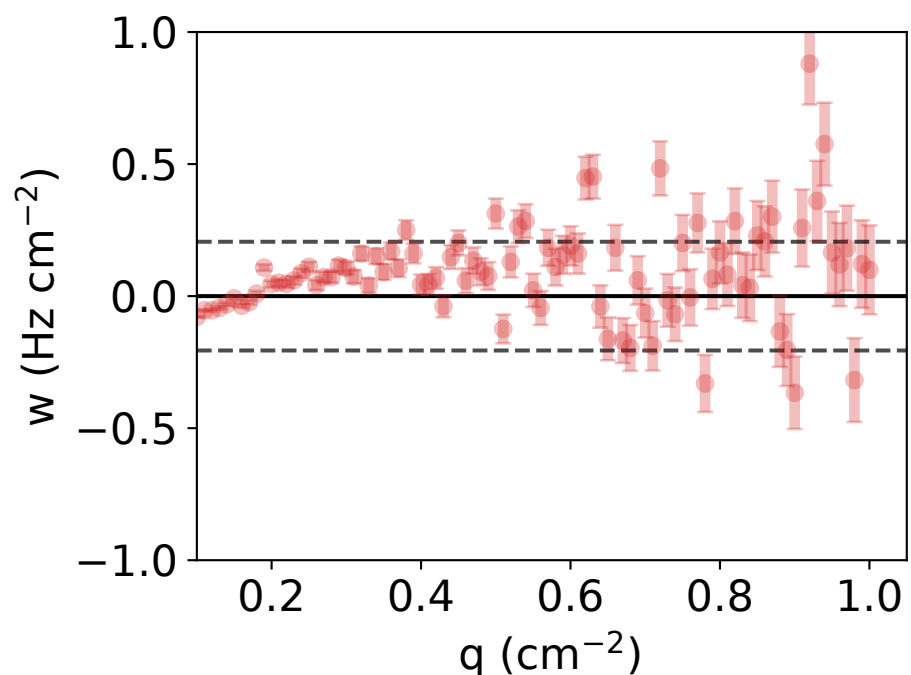
$\nu = 1.647 \pm 0.014$, $M = 16.746 \pm 0.599$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.206 Hz/cm²



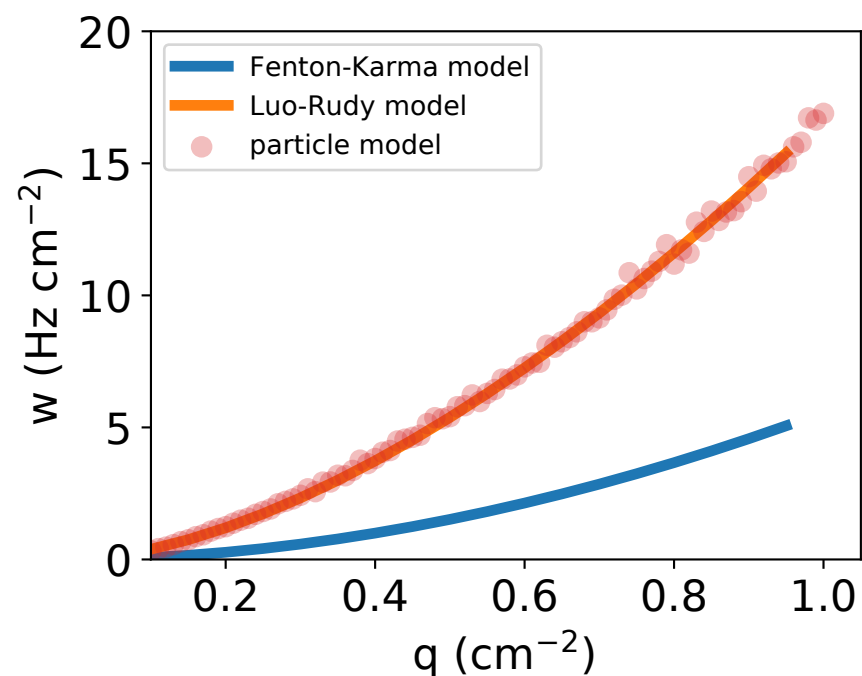
force_code=2, neighbors=0, reflect=0
 $r = 0.20730$ cm, $\kappa = 200.00000$ Hz
 $D = 0.50000$ cm²/s, $a = 10.61980$ cm²/s, $x_0 = 0$ cm



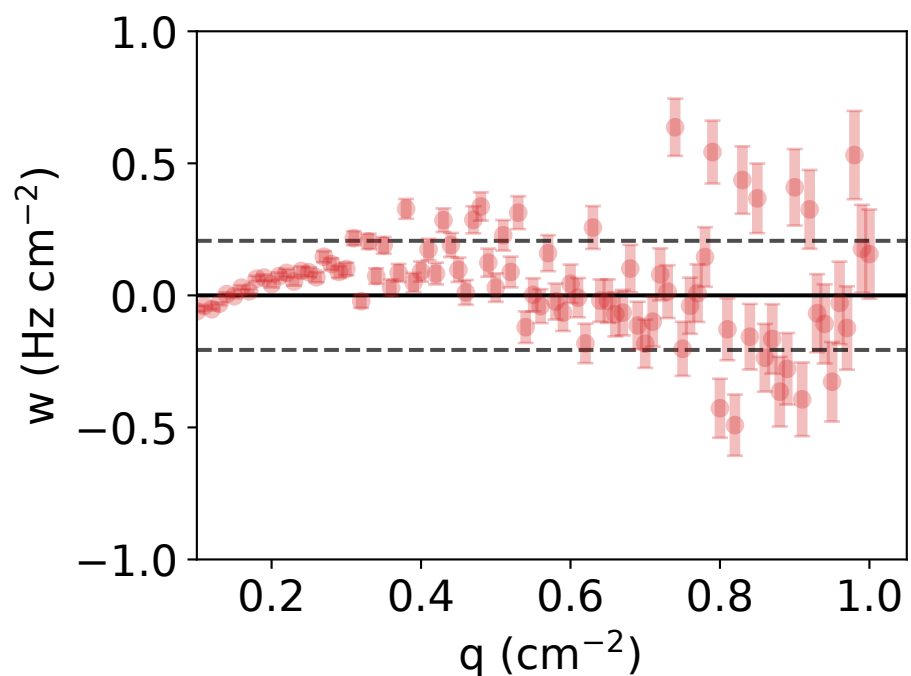
$\nu = 1.657 \pm 0.014$, $M = 16.716 \pm 0.609$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.206 Hz/cm²



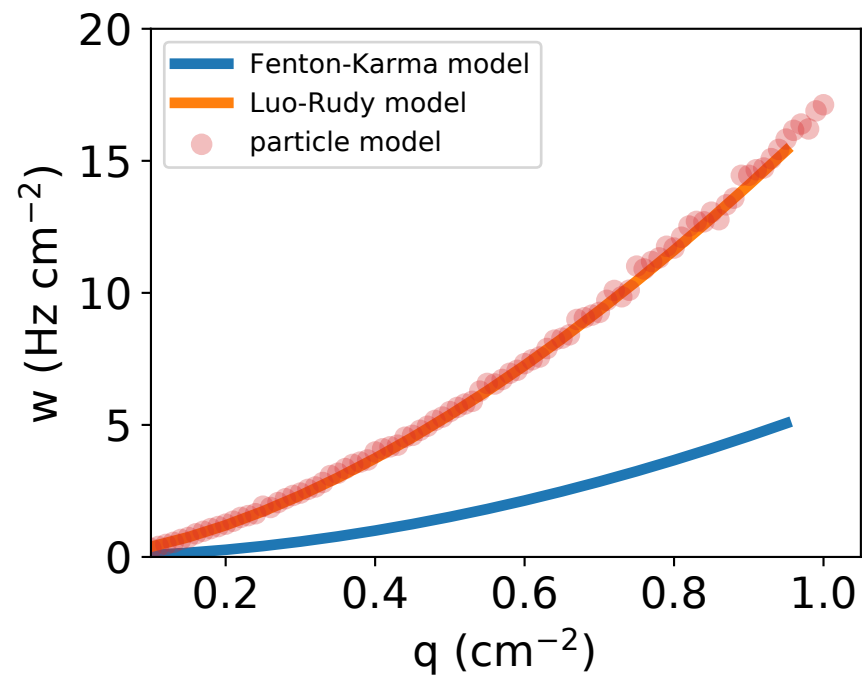
force_code=2, neighbors=0, reflect=0
 $r = 0.20457$ cm, $\kappa = 200.00000$ Hz
 $D = 0.66654$ cm²/s, $a = 10.91480$ cm²/s, $x_0 = 0$ cm



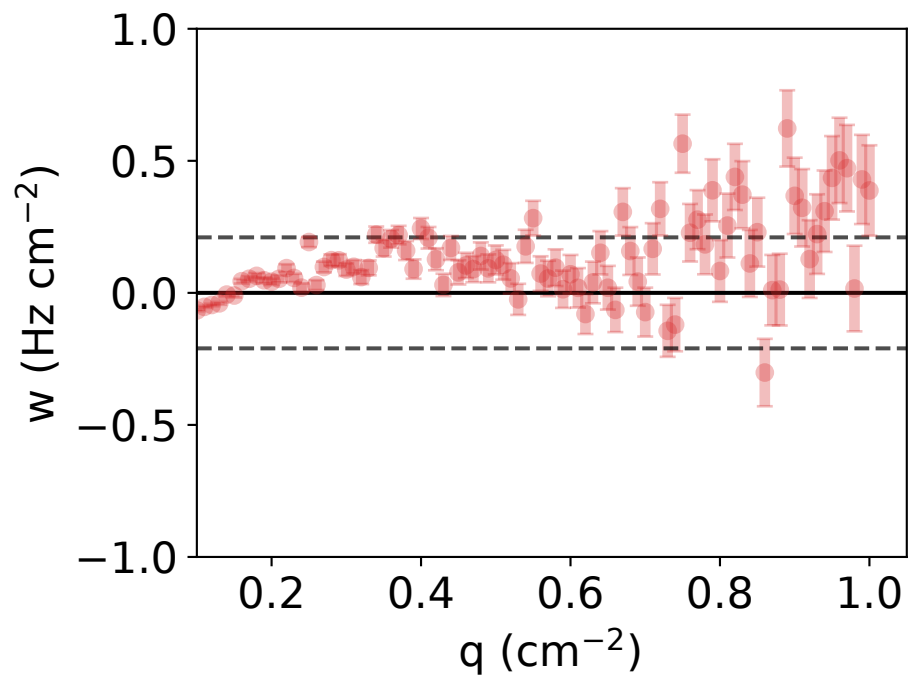
$\nu = 1.636 \pm 0.014$, $M = 16.534 \pm 0.604$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.207 Hz/cm²



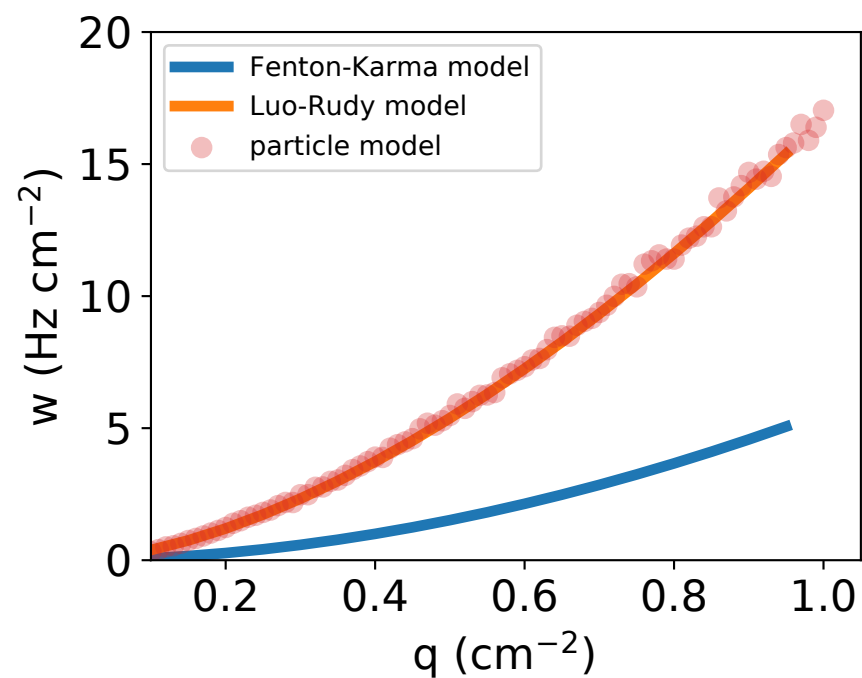
force_code=2, neighbors=0, reflect=0
 $r = 0.20553$ cm, $\kappa = 200.00000$ Hz
 $D = 0.59667$ cm²/s, $a = 10.83420$ cm²/s, $x_0 = 0$ cm



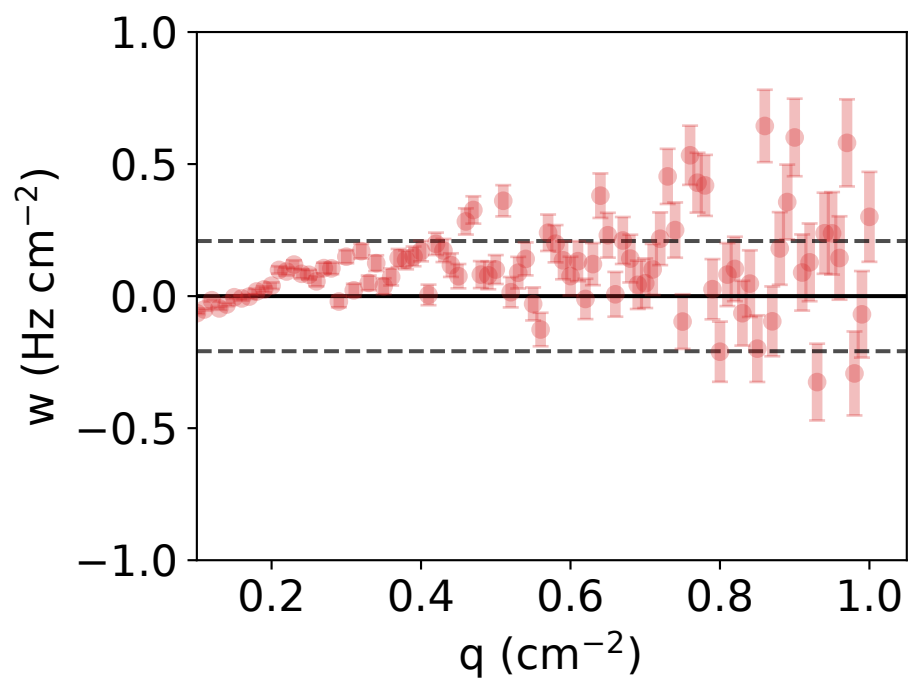
$\nu = 1.650 \pm 0.013$, $M = 16.888 \pm 0.539$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.210 Hz/cm²



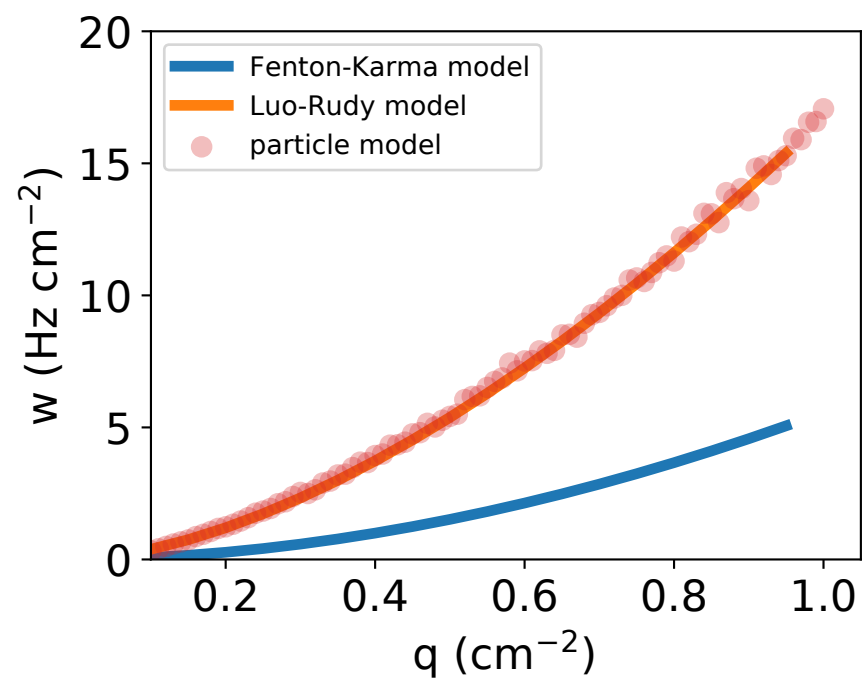
force_code=2, neighbors=0, reflect=0
 $r = 0.19598$ cm, $\kappa = 218.35500$ Hz
 $D = 0.16424$ cm²/s, $a = 10.81160$ cm²/s, $x_0 = 0$ cm



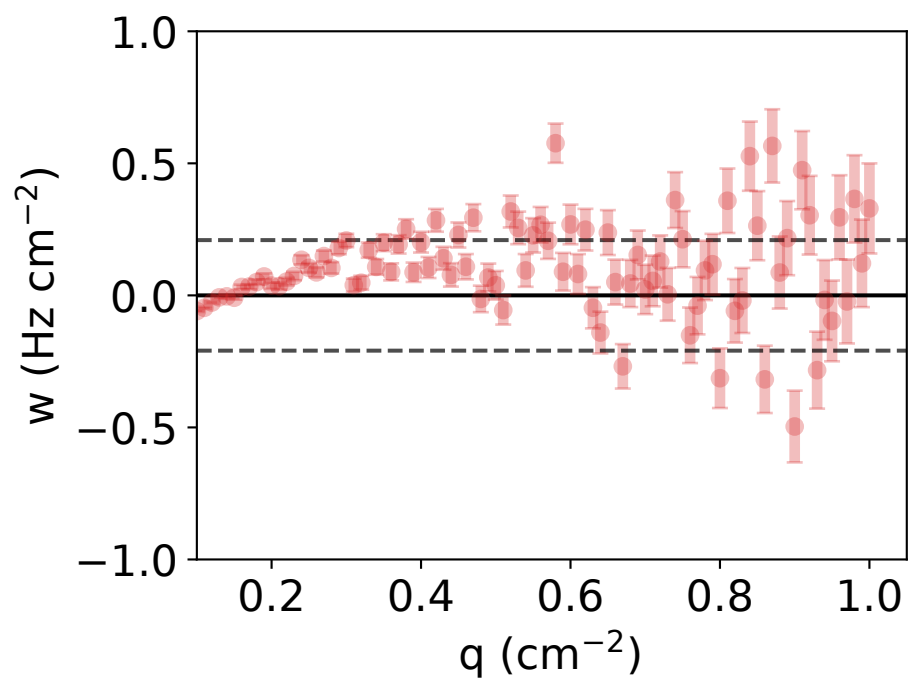
$\nu = 1.652 \pm 0.012$, $M = 16.777 \pm 0.541$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.209 Hz/cm²



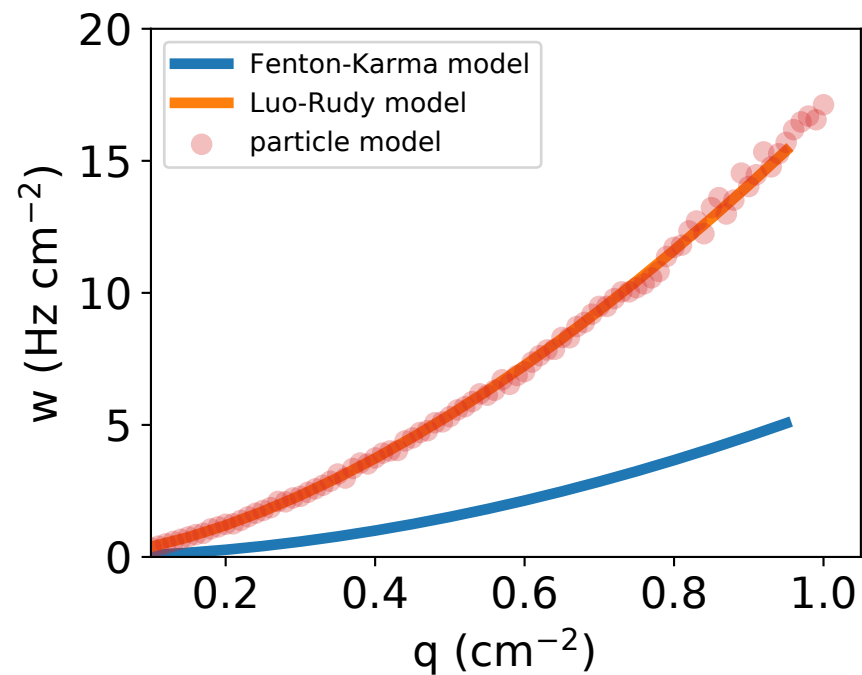
force_code=2, neighbors=0, reflect=0
 $r = 0.20460$ cm, $\kappa = 200.00000$ Hz
 $D = 0.19775$ cm²/s, $a = 11.47930$ cm²/s, $x_0 = 0$ cm



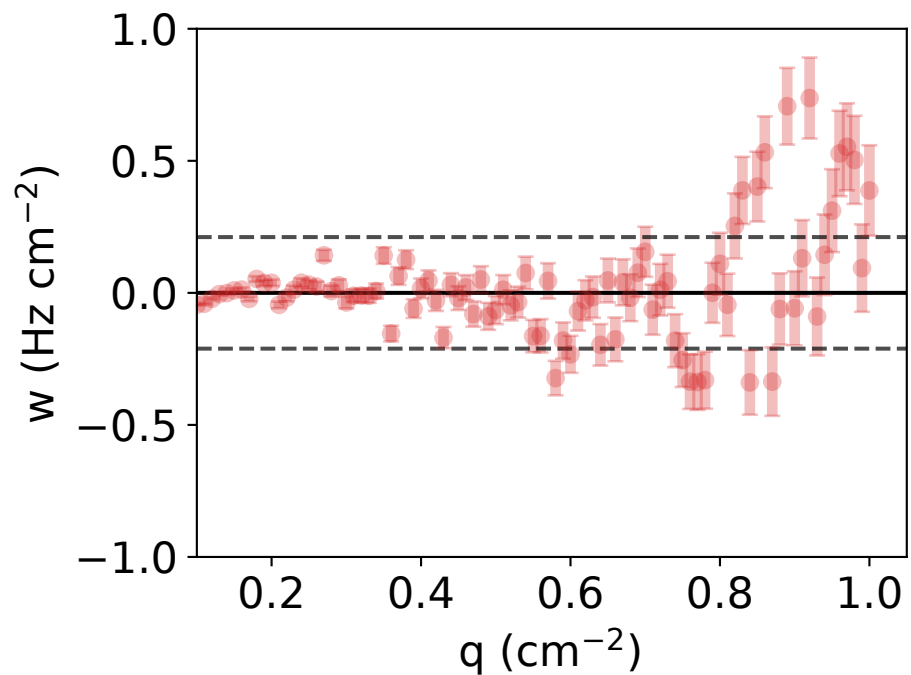
$\nu = 1.639 \pm 0.013$, $M = 16.681 \pm 0.564$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.209 Hz/cm²



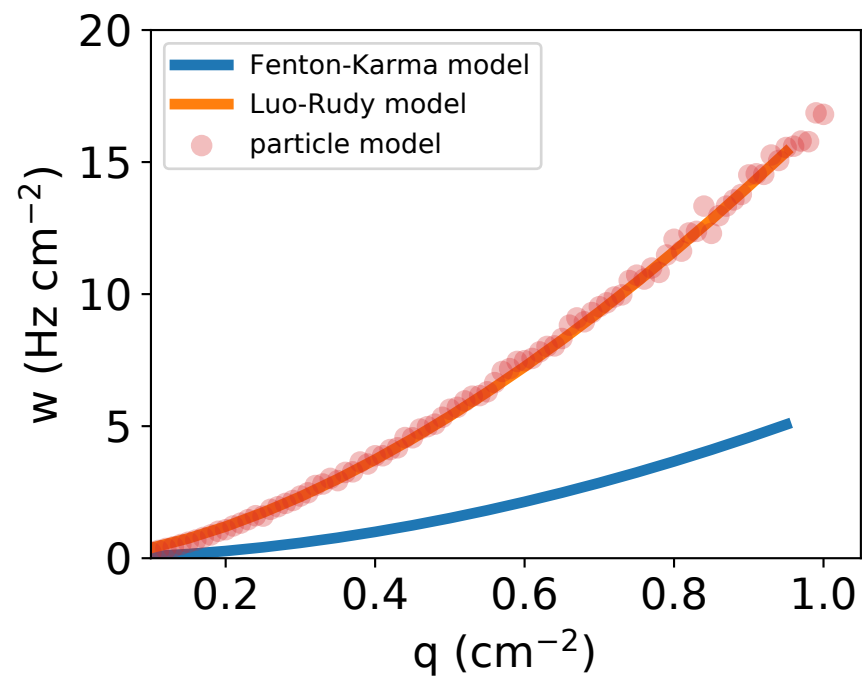
force_code=2, neighbors=0, reflect=0
 $r = 0.30393$ cm, $\kappa = 100.00000$ Hz
 $D = 0.52191$ cm²/s, $a = 14.00950$ cm²/s, $x_0 = 0$ cm



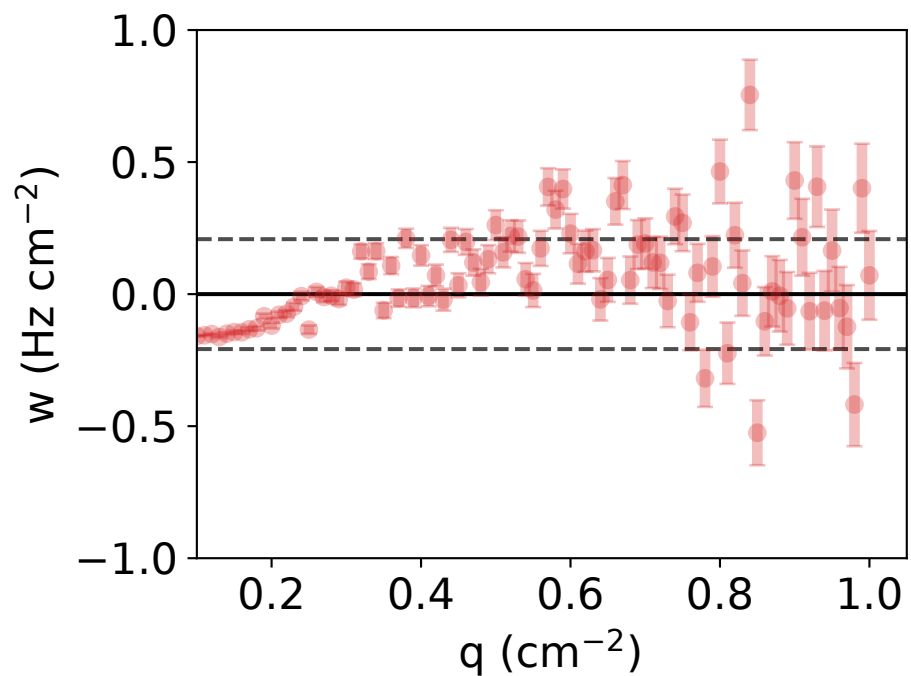
$\nu = 1.649 \pm 0.010$, $M = 16.908 \pm 0.474$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.211 Hz/cm²



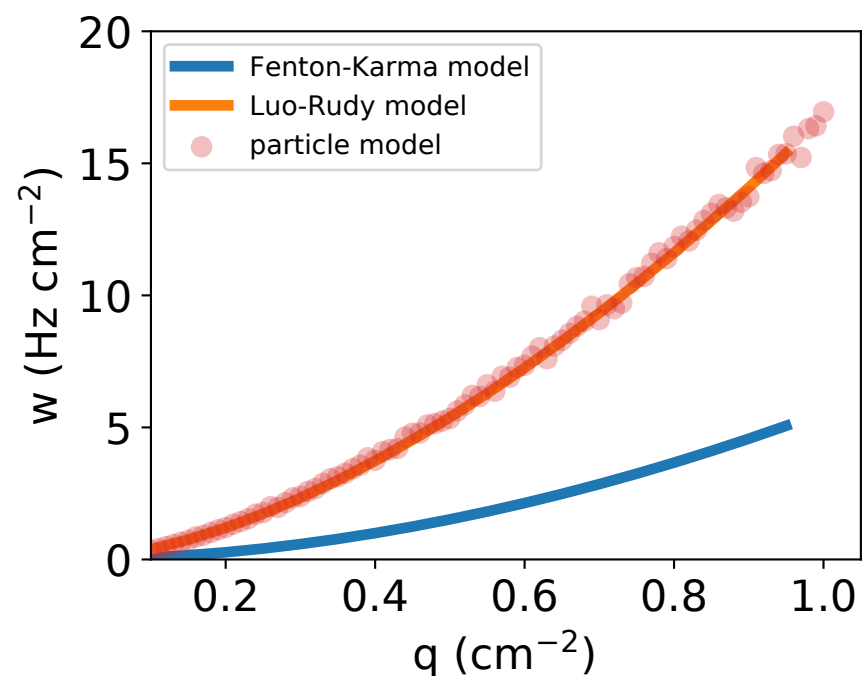
force_code=2, neighbors=0, reflect=0
 $r = 0.09806$ cm, $\kappa = 690.25500$ Hz
 $D = 0.72622$ cm²/s, $a = 6.80454$ cm²/s, $x_0 = 0$ cm



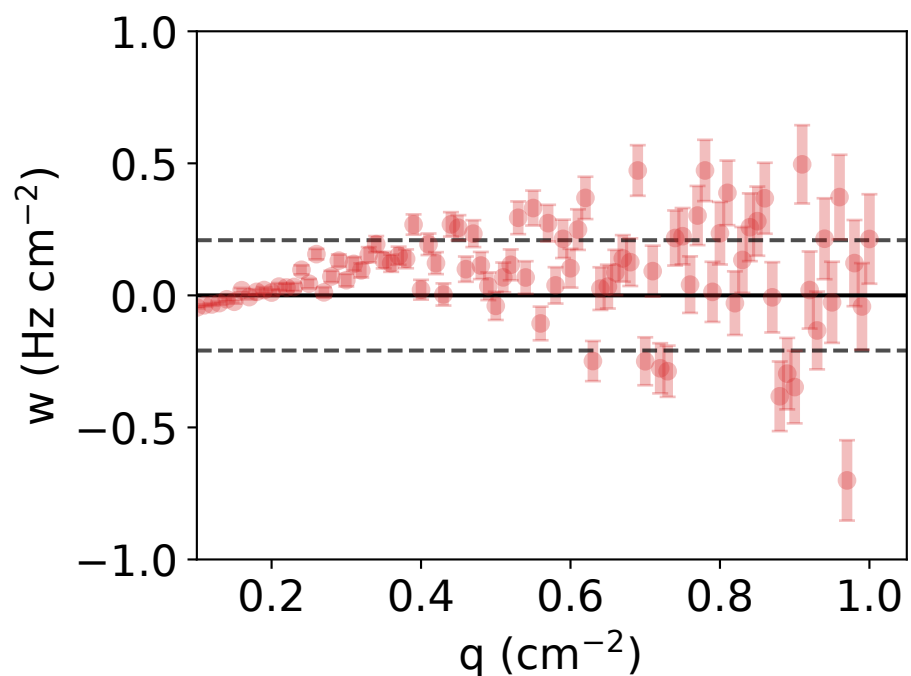
$\nu = 1.756 \pm 0.025$, $M = 16.603 \pm 1.013$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.208 Hz/cm²



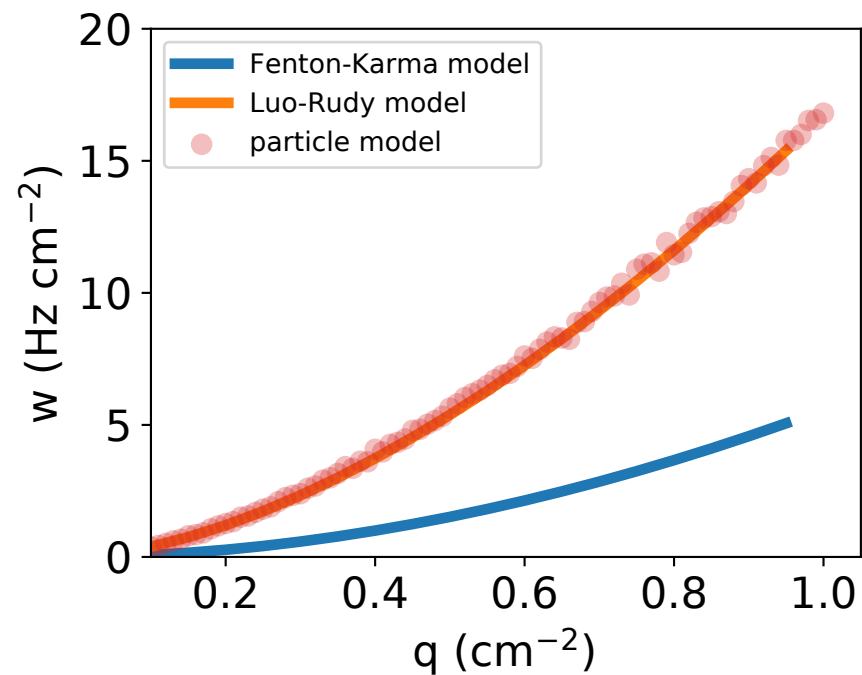
force_code=2, neighbors=0, reflect=0
 $r = 0.16591$ cm, $\kappa = 250.00000$ Hz
 $D = 0.00000$ cm²/s, $a = 19.31230$ cm²/s, $x_0 = 0$ cm



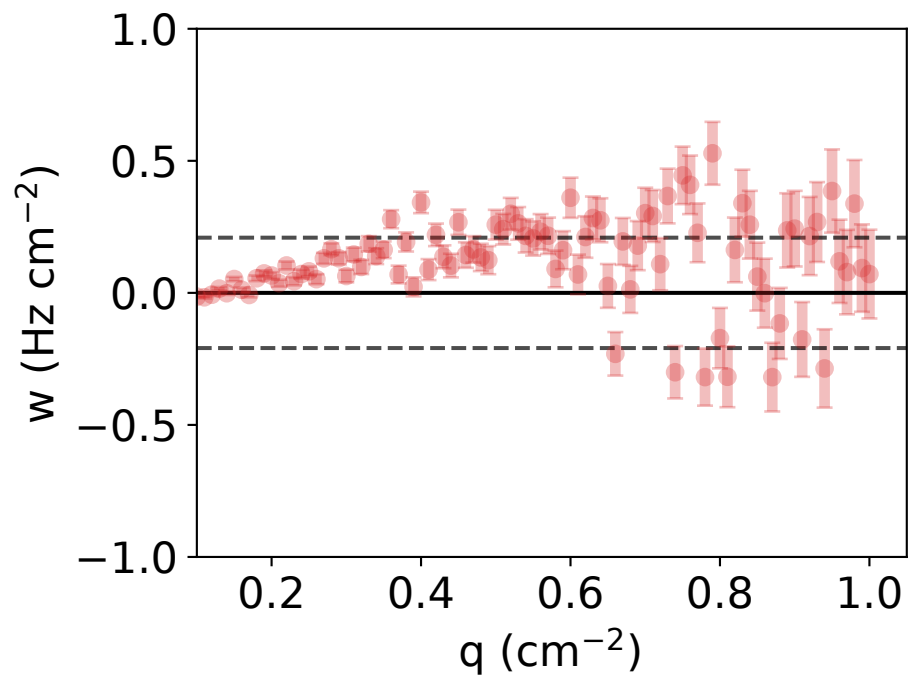
$\nu = 1.646 \pm 0.011$, $M = 16.649 \pm 0.529$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.209 Hz/cm²



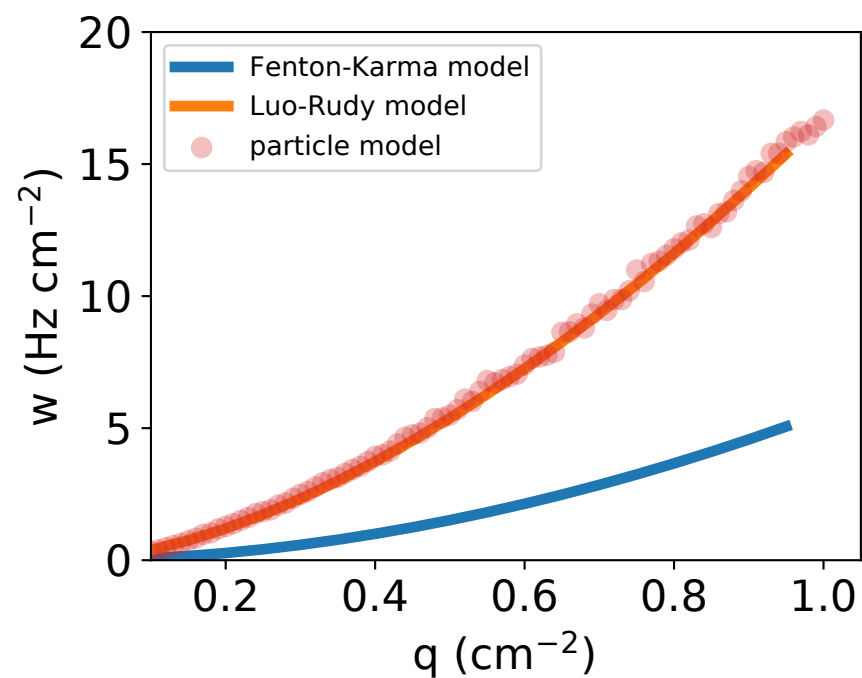
force_code=2, neighbors=0, reflect=0
 $r = 0.16524$ cm, $\kappa = 250.00000$ Hz
 $D = 0.00214$ cm²/s, $a = 19.12330$ cm²/s, $x_0 = 0$ cm



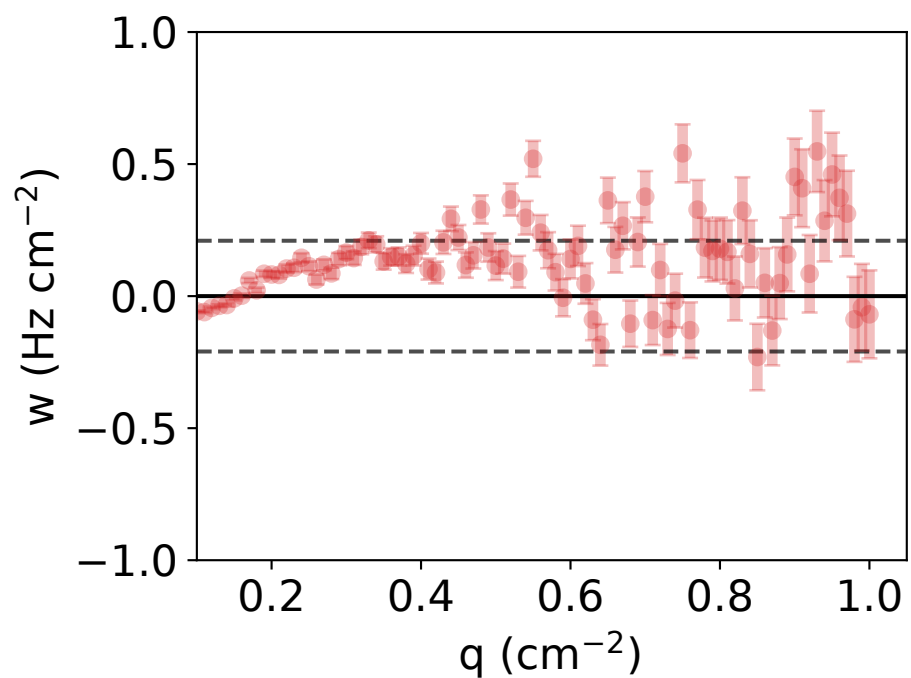
$\nu = 1.627 \pm 0.009$, $M = 16.720 \pm 0.439$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.209 Hz/cm²



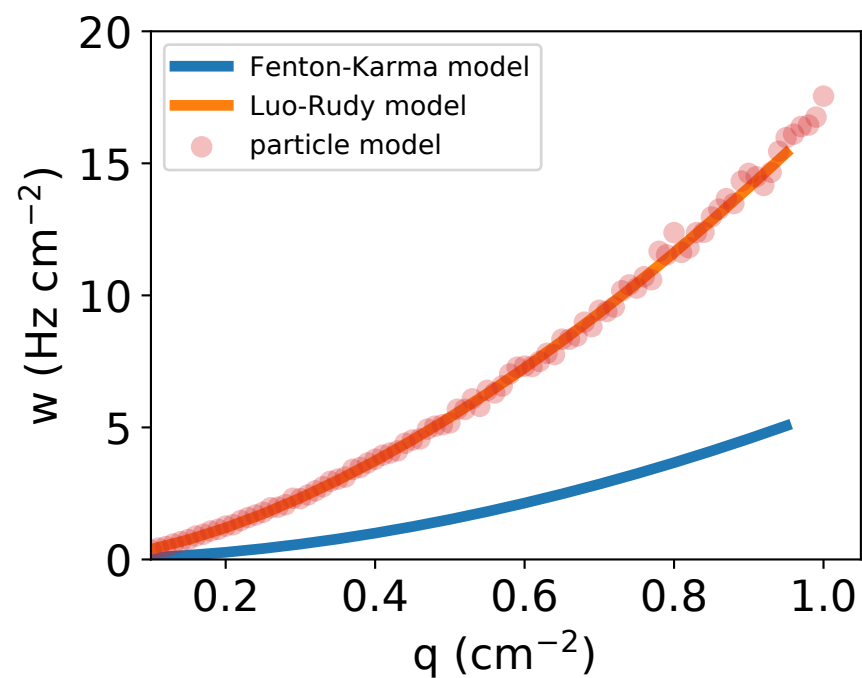
force_code=2, neighbors=0, reflect=0
 $r = 0.17984$ cm, $\kappa = 250.00000$ Hz
 $D = 0.77636$ cm²/s, $a = 10.14860$ cm²/s, $x_0 = 0$ cm



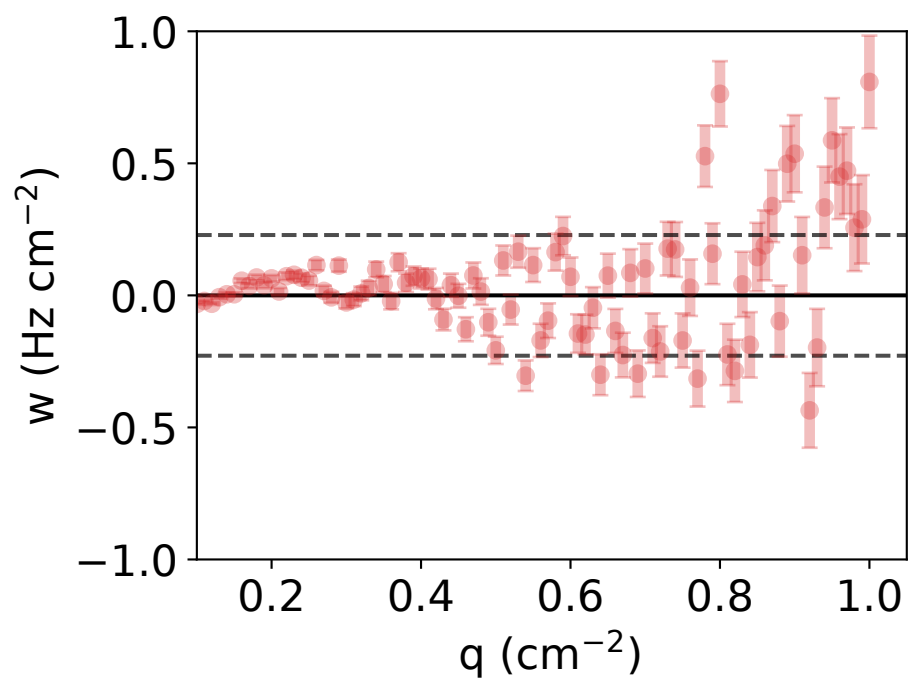
$\nu = 1.646 \pm 0.014$, $M = 16.727 \pm 0.588$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.210 Hz/cm²



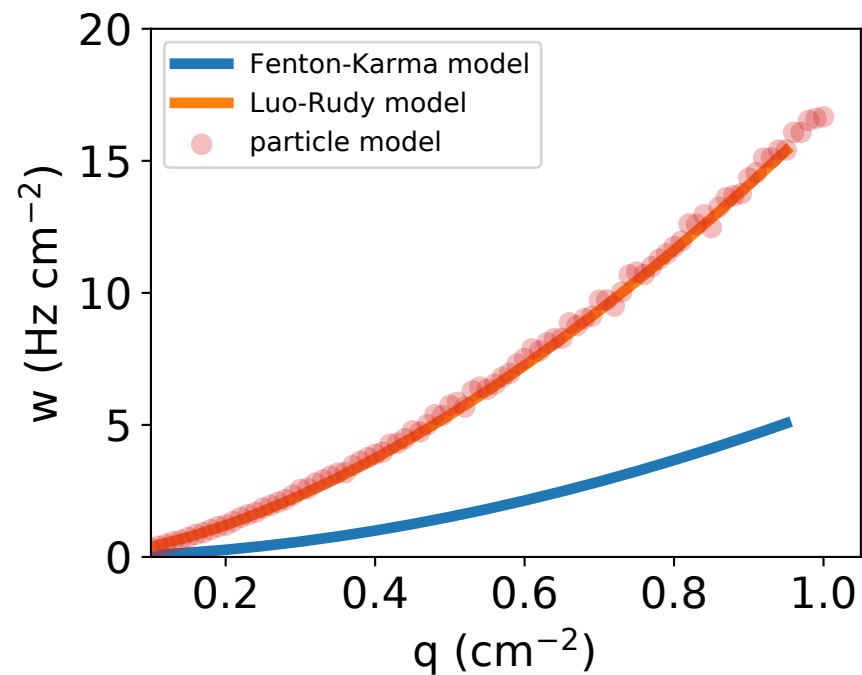
force_code=2, neighbors=0, reflect=0
 $r = 0.30779$ cm, $\kappa = 100.00000$ Hz
 $D = 0.53230$ cm²/s, $a = 13.93150$ cm²/s, $x_0 = 0$ cm



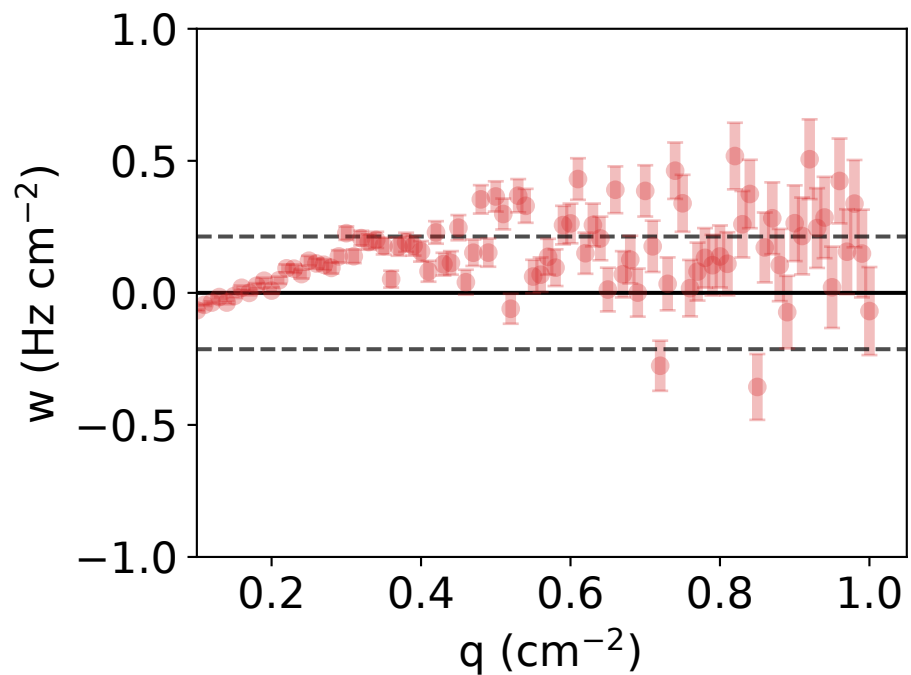
$\nu = 1.637 \pm 0.010$, $M = 16.913 \pm 0.509$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.228 Hz/cm²



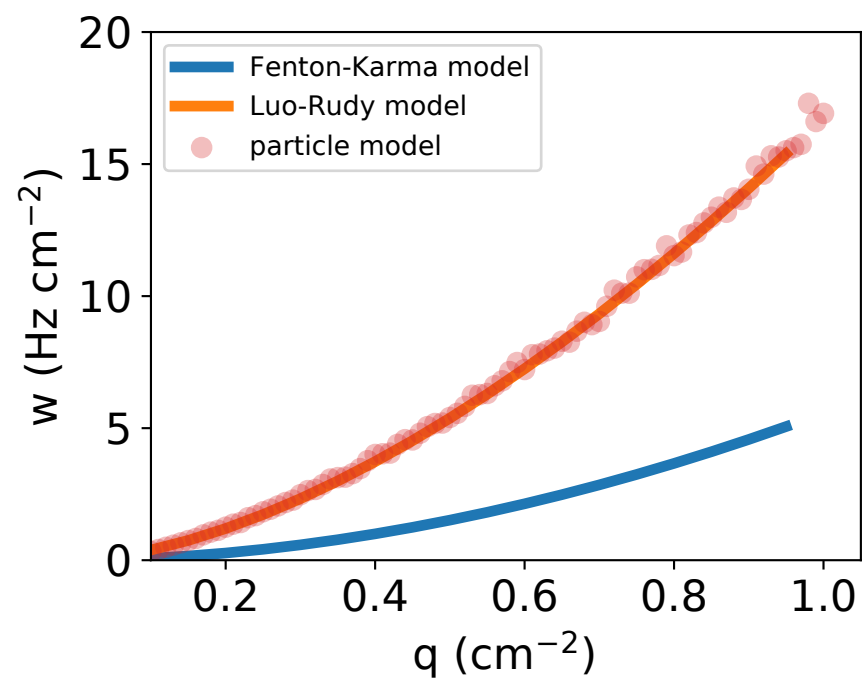
force_code=2, neighbors=0, reflect=0
 $r = 0.20674$ cm, $\kappa = 200.00000$ Hz
 $D = 0.31949$ cm²/s, $a = 11.17600$ cm²/s, $x_0 = 0$ cm



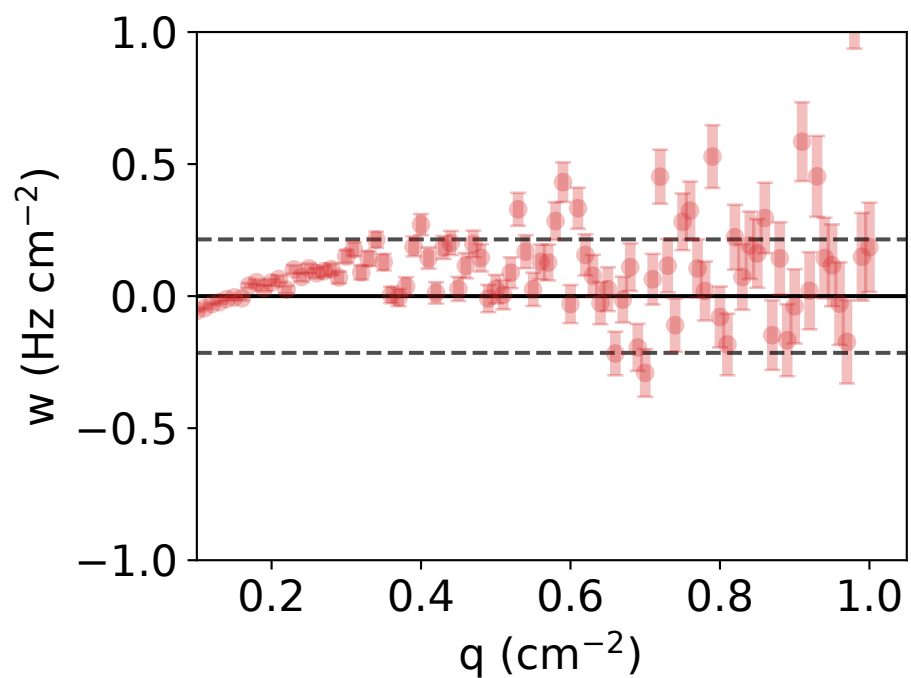
$\nu = 1.650 \pm 0.013$, $M = 16.776 \pm 0.553$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.213 Hz/cm²



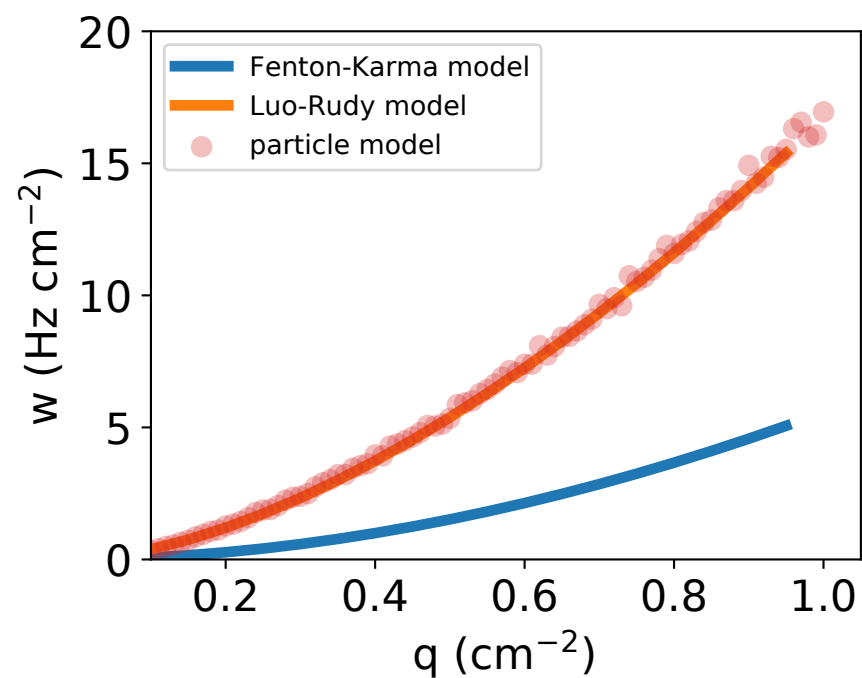
force_code=2, neighbors=0, reflect=0
 $r = 0.20485$ cm, $\kappa = 200.00000$ Hz
 $D = 0.73647$ cm²/s, $a = 10.85580$ cm²/s, $x_0 = 0$ cm



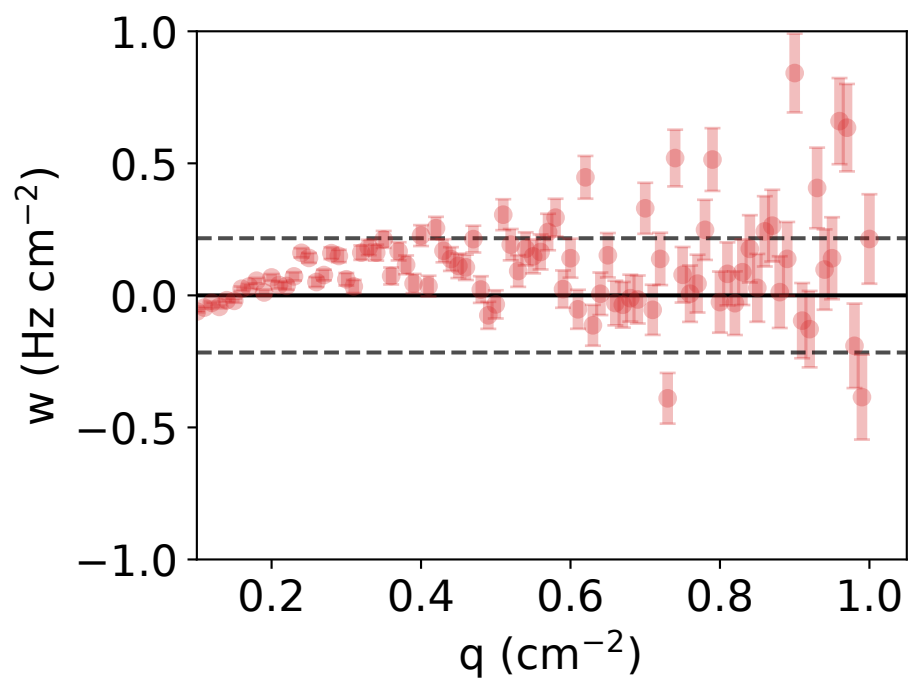
$\nu = 1.645 \pm 0.012$, $M = 16.776 \pm 0.536$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.215 Hz/cm²



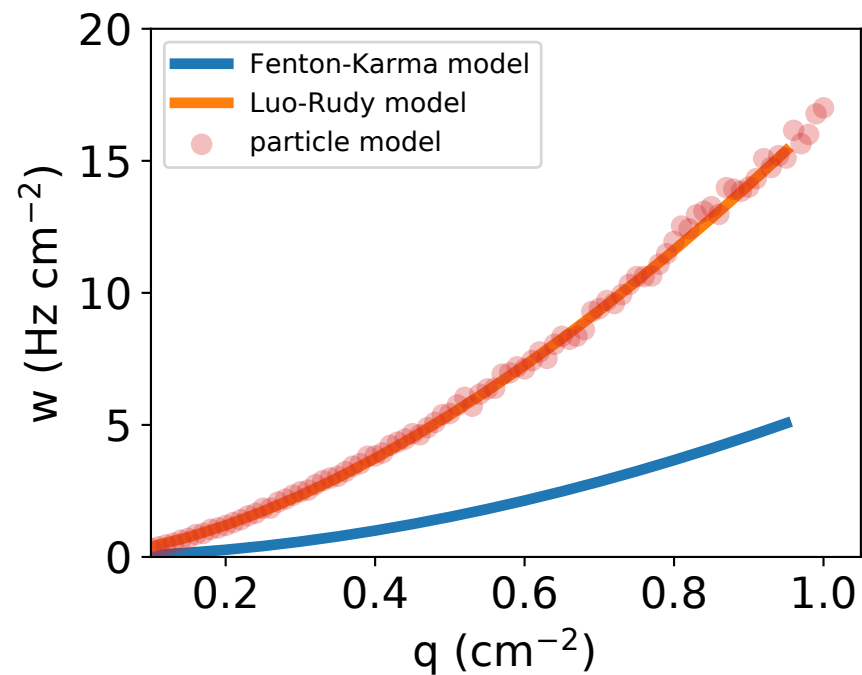
force_code=2, neighbors=0, reflect=0
 $r = 0.20495$ cm, $\kappa = 200.00000$ Hz
 $D = 0.66521$ cm²/s, $a = 10.82030$ cm²/s, $x_0 = 0$ cm



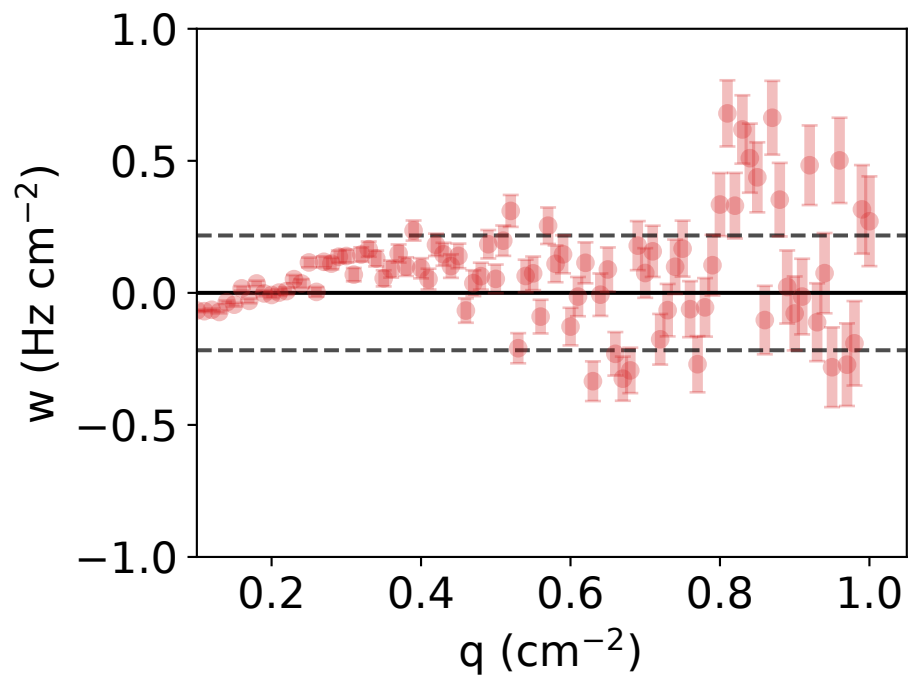
$\nu = 1.646 \pm 0.013$, $M = 16.754 \pm 0.567$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.216 Hz/cm²



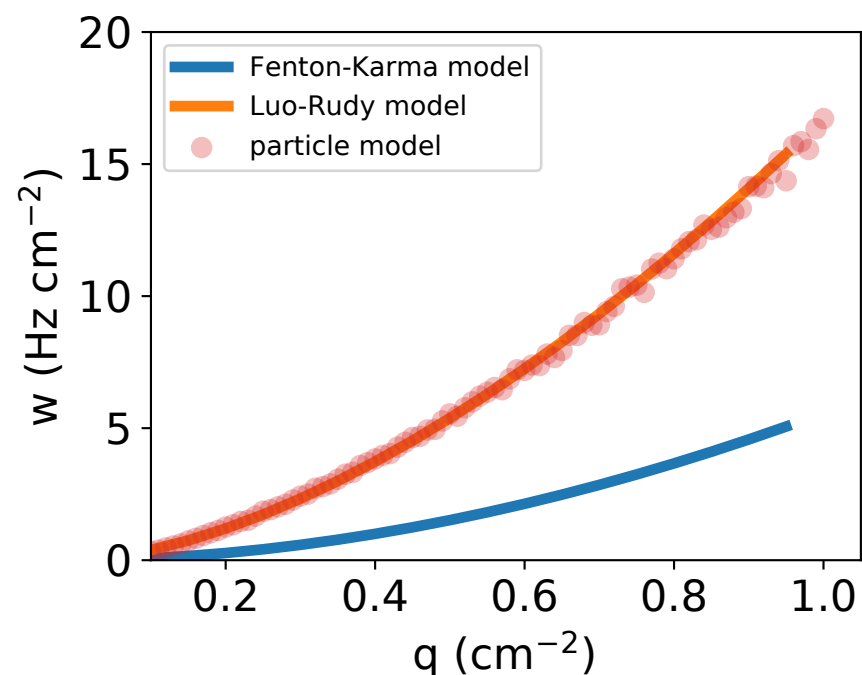
force_code=2, neighbors=0, reflect=0
 $r = 0.19820$ cm, $\kappa = 212.63600$ Hz
 $D = 0.70632$ cm²/s, $a = 10.16300$ cm²/s, $x_0 = 0$ cm



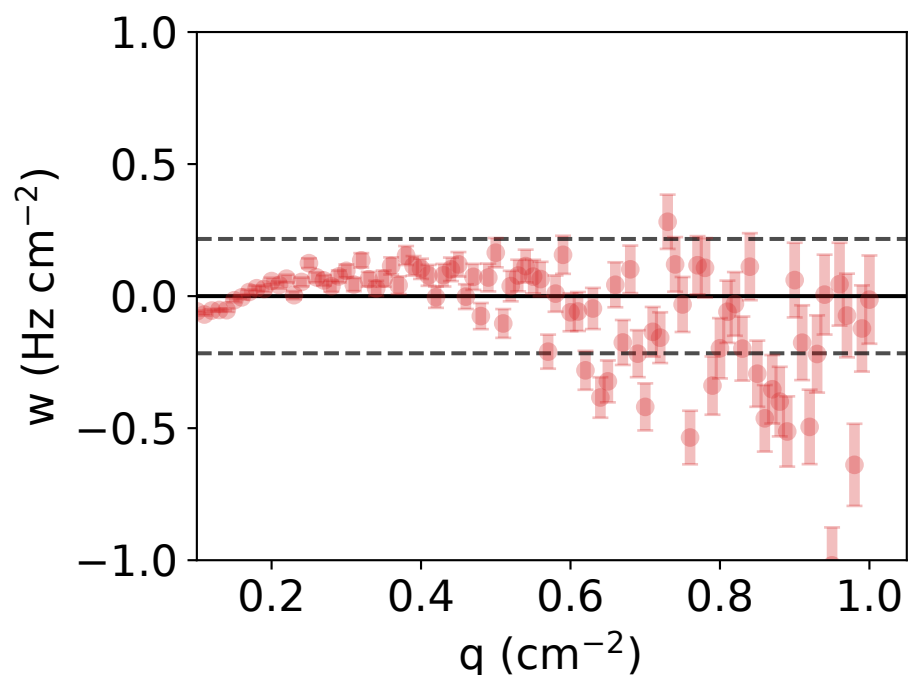
$\nu = 1.664 \pm 0.014$, $M = 16.735 \pm 0.630$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.217 Hz/cm²



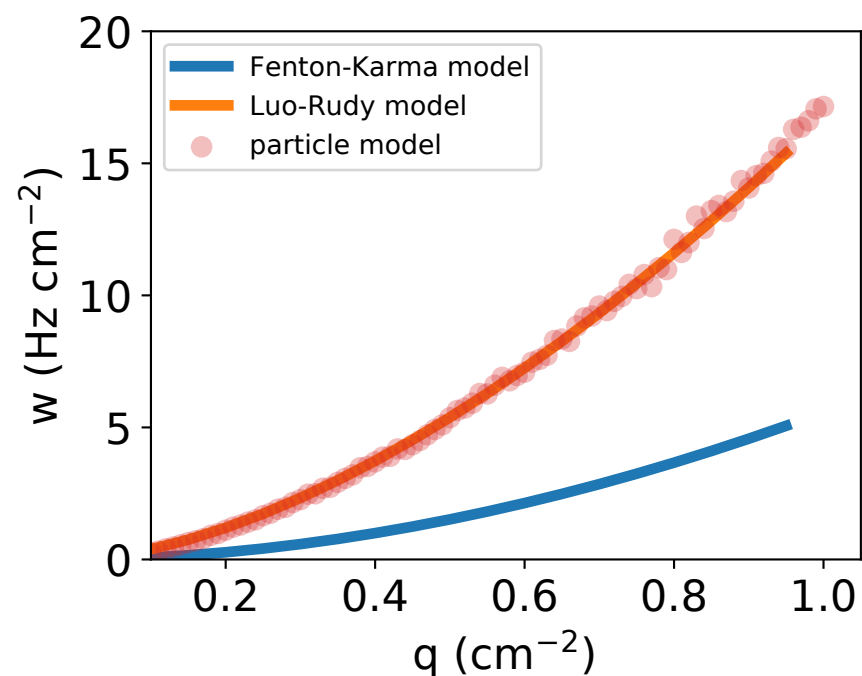
force_code=2, neighbors=0, reflect=0
 $r = 0.20216$ cm, $\kappa = 200.00000$ Hz
 $D = 0.78607$ cm²/s, $a = 10.61140$ cm²/s, $x_0 = 0$ cm



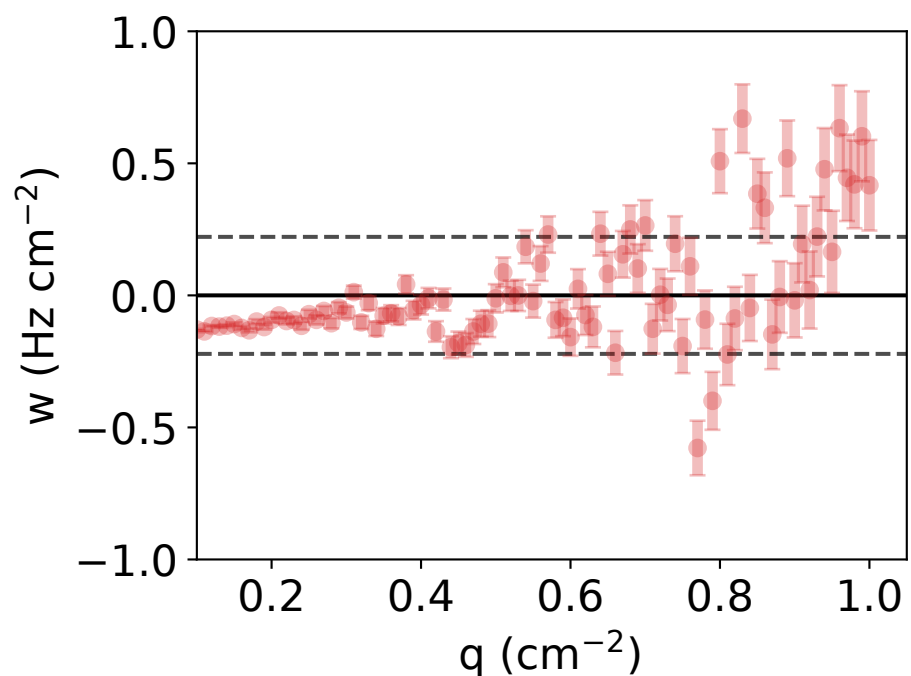
$\nu = 1.643 \pm 0.014$, $M = 16.268 \pm 0.570$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.216 Hz/cm²



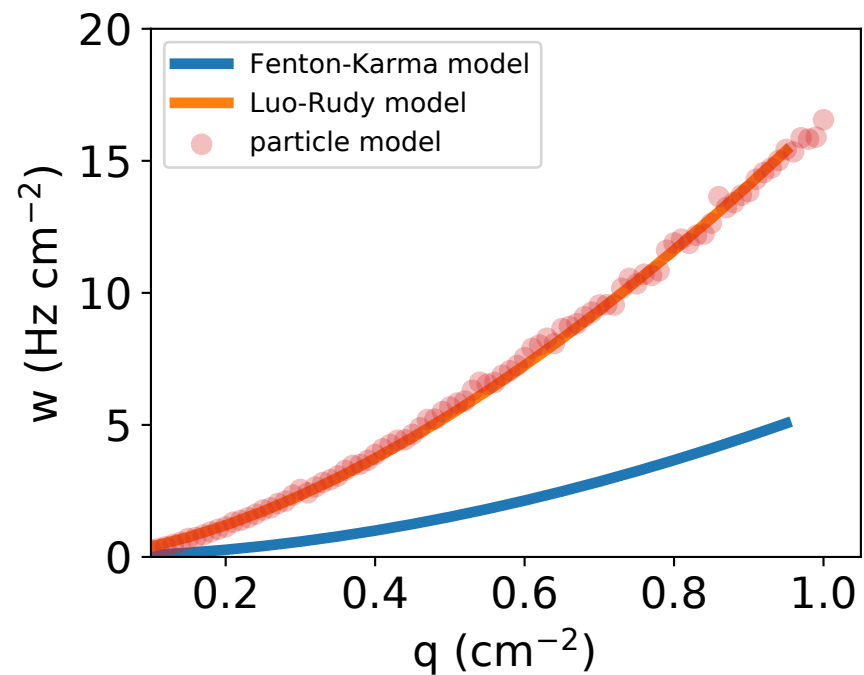
force_code=2, neighbors=0, reflect=0
 $r = 0.19628$ cm, $\kappa = 241.27600$ Hz
 $D = 0.65291$ cm²/s, $a = 8.09348$ cm²/s, $x_0 = 0$ cm



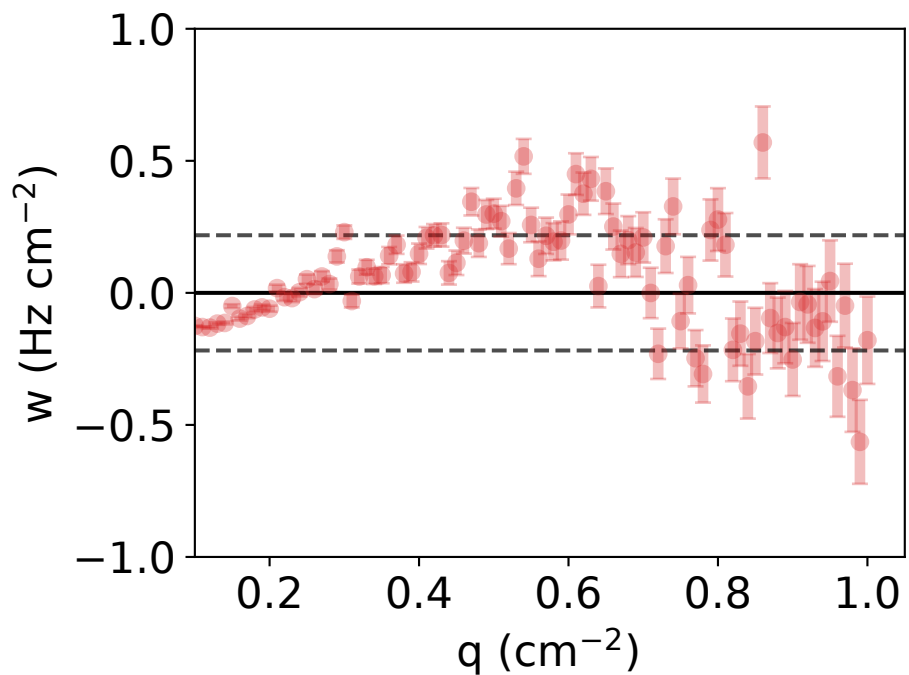
$\nu = 1.743 \pm 0.015$, $M = 16.955 \pm 0.643$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.222 Hz/cm²



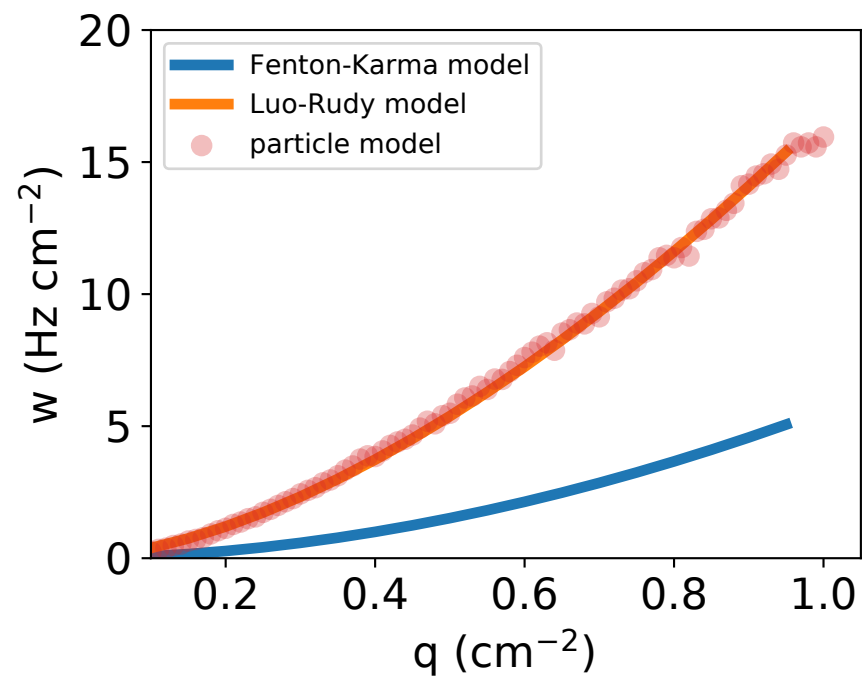
force_code=2, neighbors=0, reflect=0
 $r = 0.09499$ cm, $\kappa = 671.99400$ Hz
 $D = 0.66343$ cm²/s, $a = 7.37858$ cm²/s, $x_0 = 0$ cm



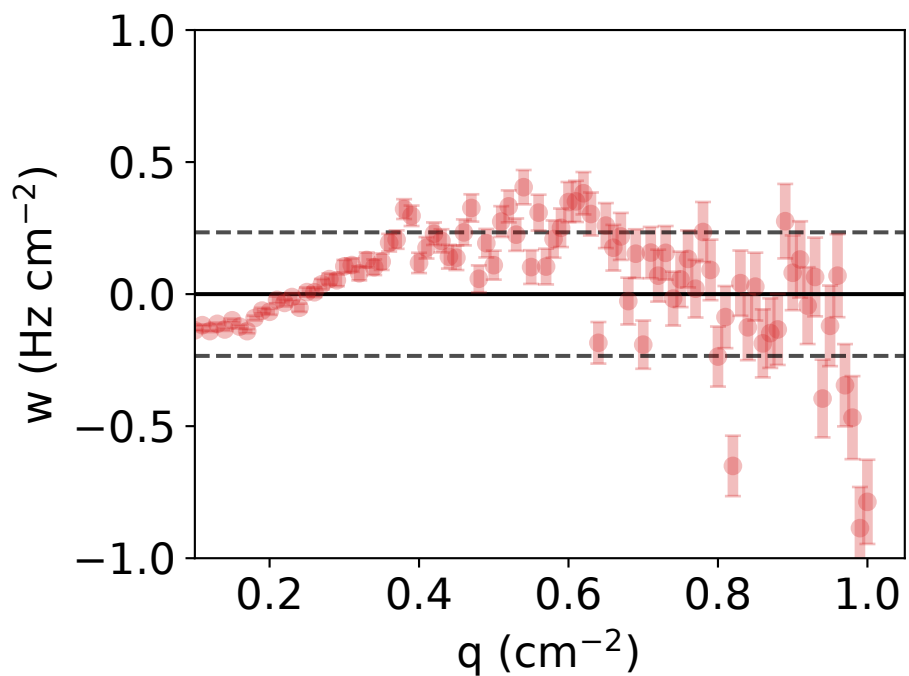
$\nu = 1.709 \pm 0.023$, $M = 16.355 \pm 0.945$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.218 Hz/cm²



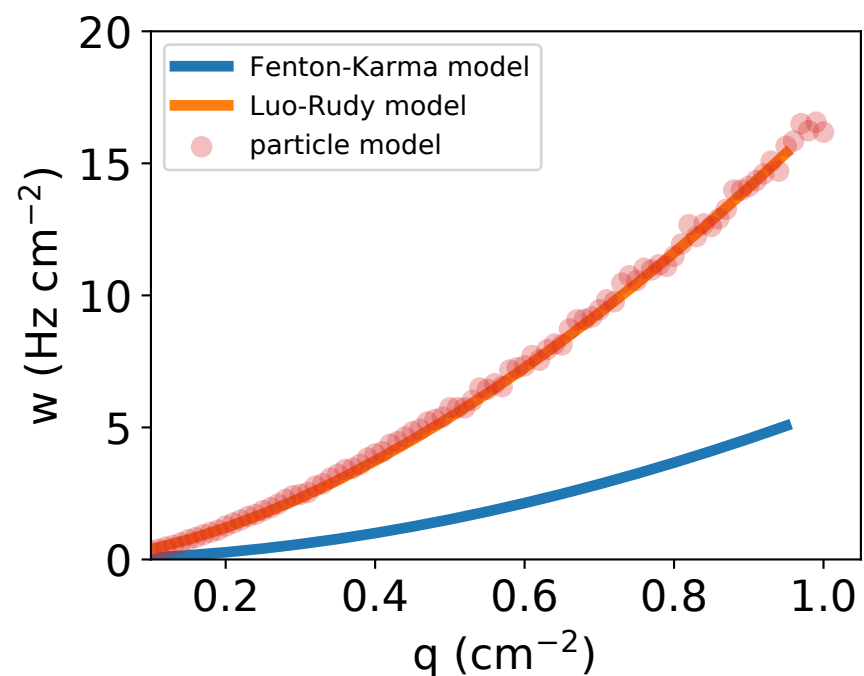
force_code=2, neighbors=0, reflect=0
 $r = 0.09756$ cm, $\kappa = 662.65000$ Hz
 $D = 0.34114$ cm²/s, $a = 7.35233$ cm²/s, $x_0 = 0$ cm



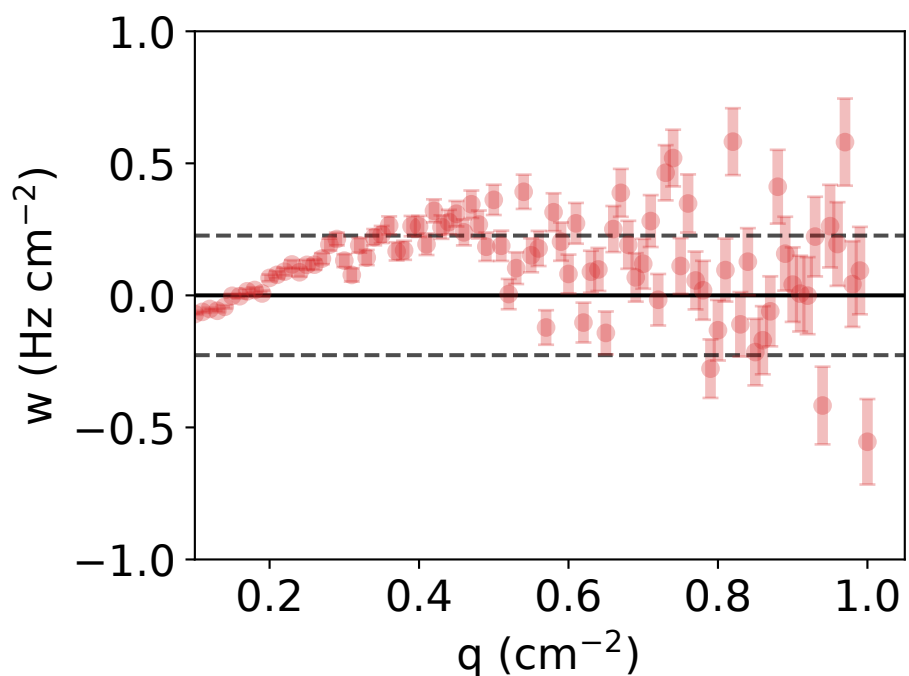
$\nu = 1.717 \pm 0.024$, $M = 16.264 \pm 0.998$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.234 Hz/cm²



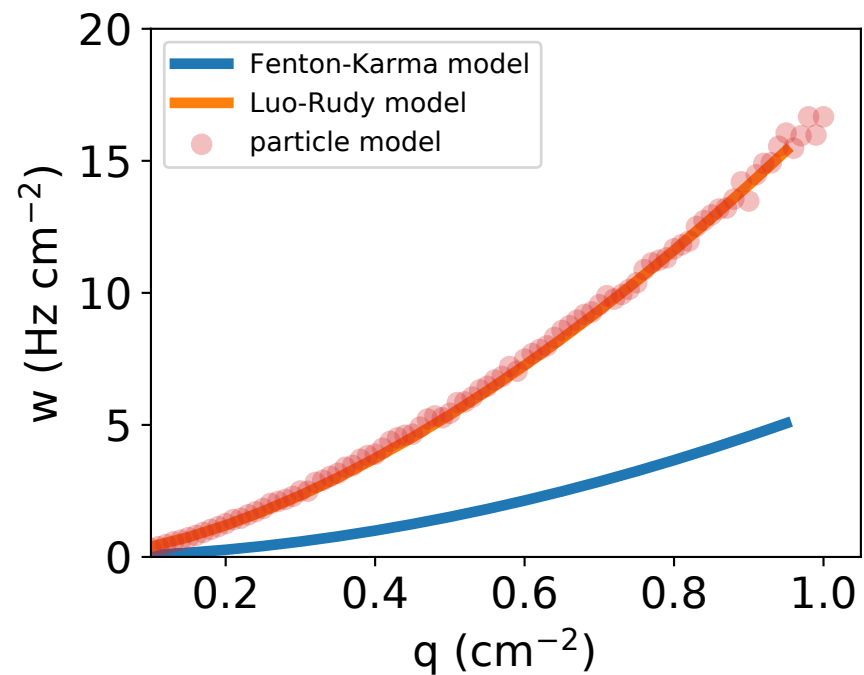
force_code=2, neighbors=0, reflect=0
 $r = 0.15963$ cm, $\kappa = 300.00000$ Hz
 $D = 0.39260$ cm²/s, $a = 9.71563$ cm²/s, $x_0 = 0$ cm



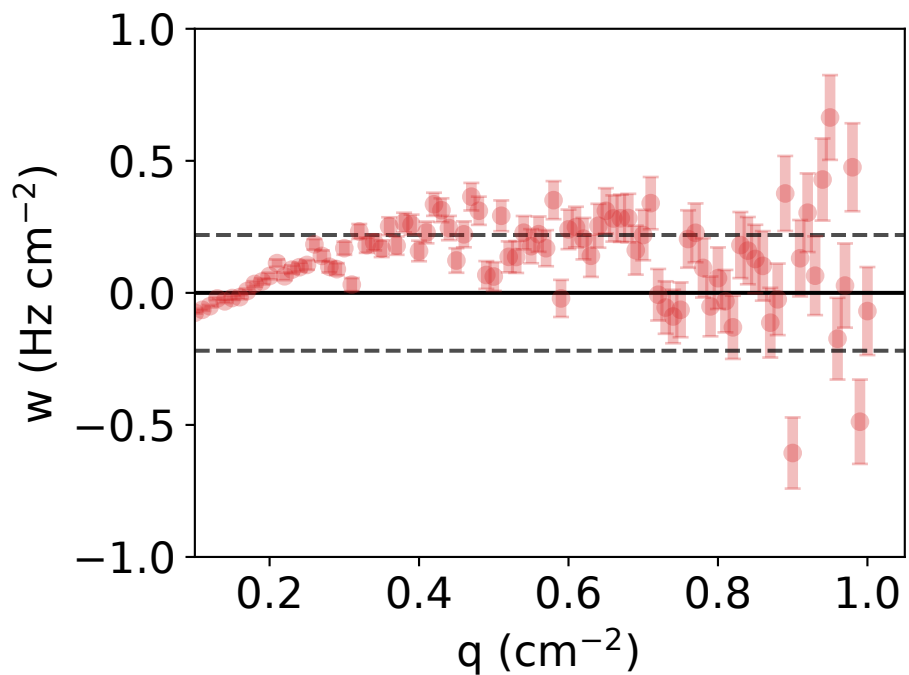
$\nu = 1.649 \pm 0.016$, $M = 16.560 \pm 0.685$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.226 Hz/cm²



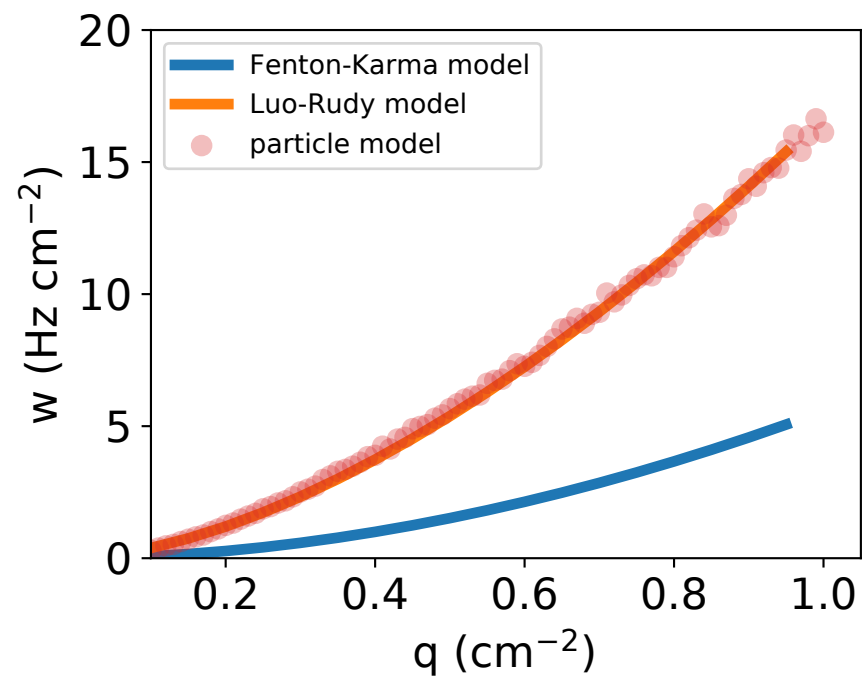
force_code=2, neighbors=0, reflect=0
 $r = 0.15947$ cm, $\kappa = 299.06800$ Hz
 $D = 0.50186$ cm²/s, $a = 9.82085$ cm²/s, $x_0 = 0$ cm



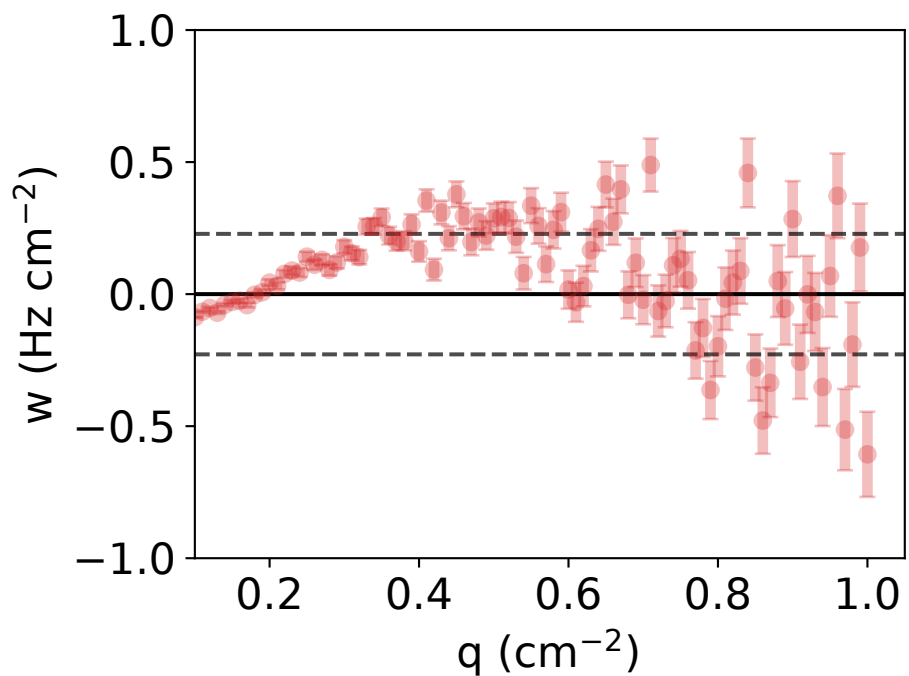
$\nu = 1.649 \pm 0.016$, $M = 16.590 \pm 0.652$ cm²($\nu - 1$)/s
 $RMSE_{particle \text{ vs full}} = 0.219$ Hz/cm²



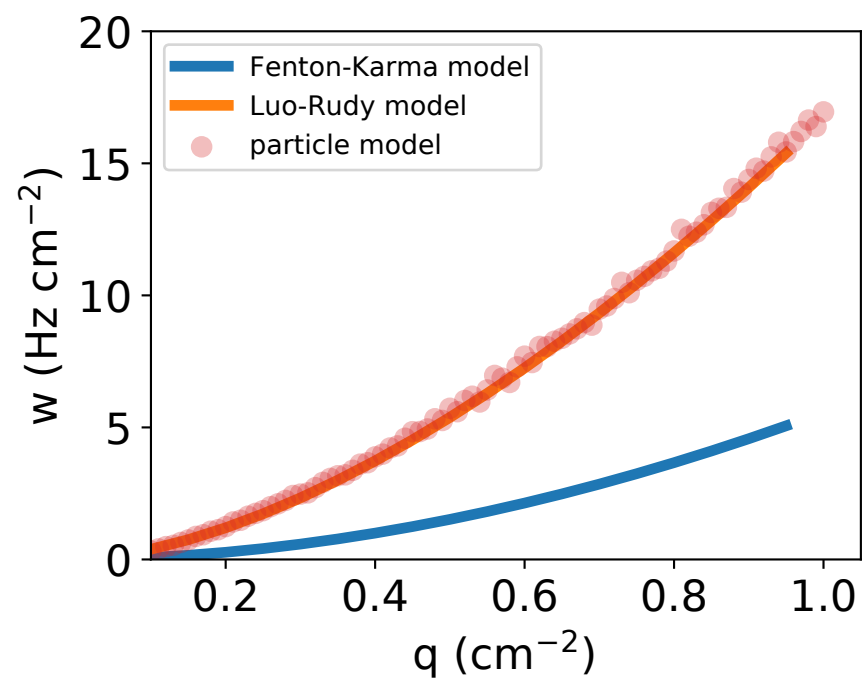
force_code=2, neighbors=0, reflect=0
 $r = 0.13122$ cm, $\kappa = 396.61700$ Hz
 $D = 0.59323$ cm²/s, $a = 9.00588$ cm²/s, $x_0 = 0$ cm



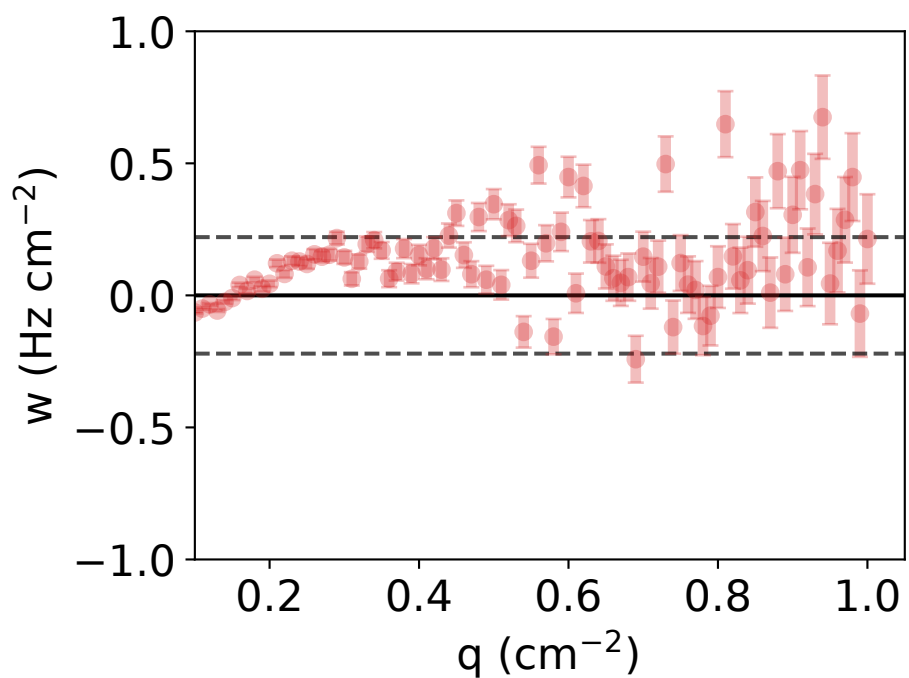
$\nu = 1.655 \pm 0.018$, $M = 16.348 \pm 0.753$ cm²($\nu - 1$)/s
 $RMSE_{particle \text{ vs full}} = 0.228$ Hz/cm²



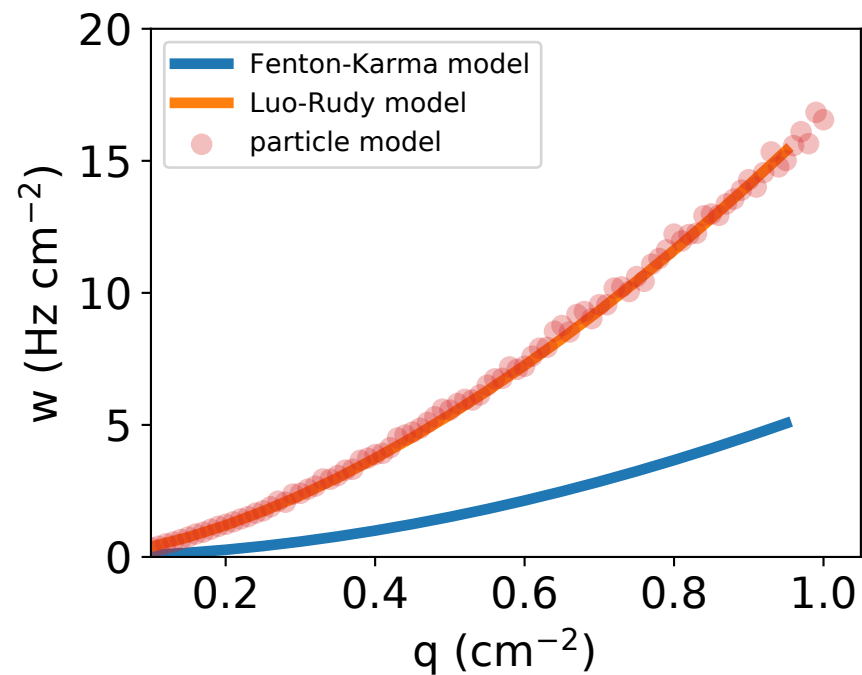
force_code=2, neighbors=0, reflect=0
 $r = 0.17962$ cm, $\kappa = 250.00000$ Hz
 $D = 0.65011$ cm²/s, $a = 10.27720$ cm²/s, $x_0 = 0$ cm



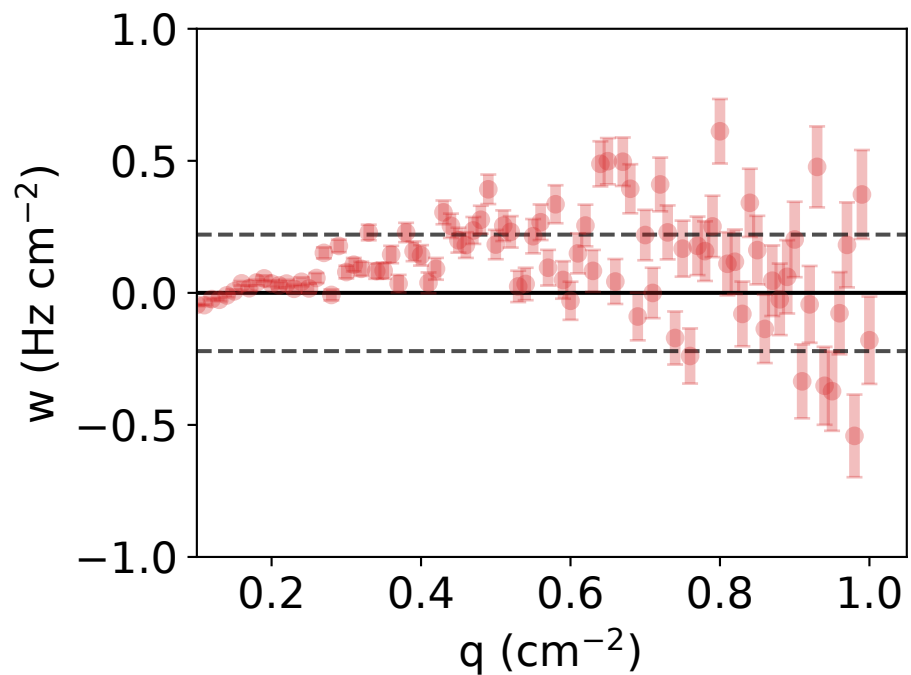
$\nu = 1.646 \pm 0.014$, $M = 16.790 \pm 0.605$ cm²($\nu - 1$)/s
 $RMSE_{particle \text{ vs full}} = 0.221$ Hz/cm²



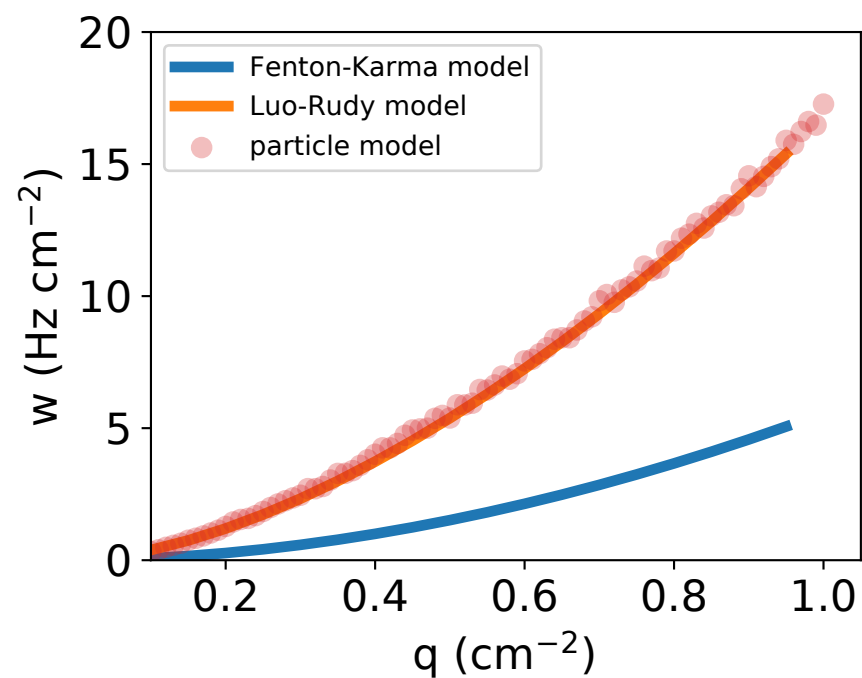
force_code=2, neighbors=0, reflect=0
 $r = 0.15644$ cm, $\kappa = 278.28300$ Hz
 $D = 0.00000$ cm²/s, $a = 18.64260$ cm²/s, $x_0 = 0$ cm



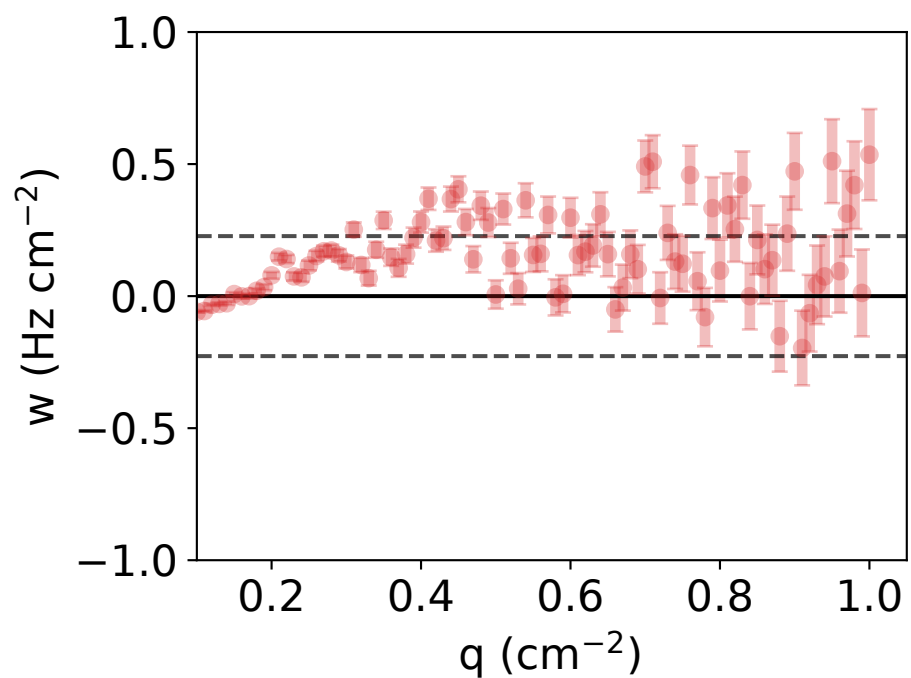
$\nu = 1.643 \pm 0.012$, $M = 16.629 \pm 0.536$ cm²($\nu - 1$)/s
 $RMSE_{particle \text{ vs full}} = 0.221$ Hz/cm²



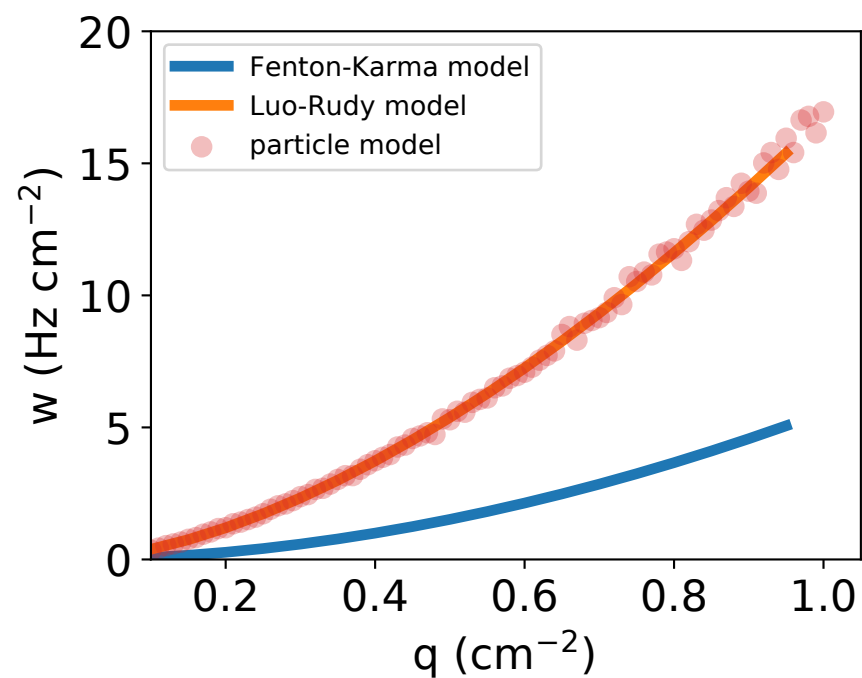
force_code=2, neighbors=0, reflect=0
 $r = 0.18004$ cm, $\kappa = 250.00000$ Hz
 $D = 0.53414$ cm²/s, $a = 10.37050$ cm²/s, $x_0 = 0$ cm



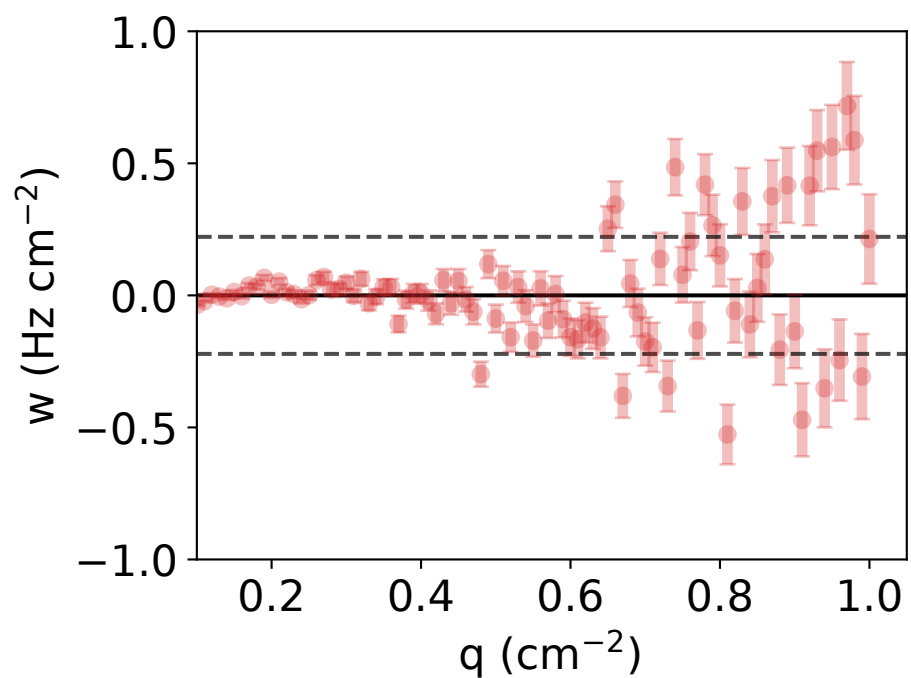
$\nu = 1.645 \pm 0.014$, $M = 16.742 \pm 0.604$ cm²($\nu - 1$)/s
 $RMSE_{particle \text{ vs full}} = 0.227$ Hz/cm²



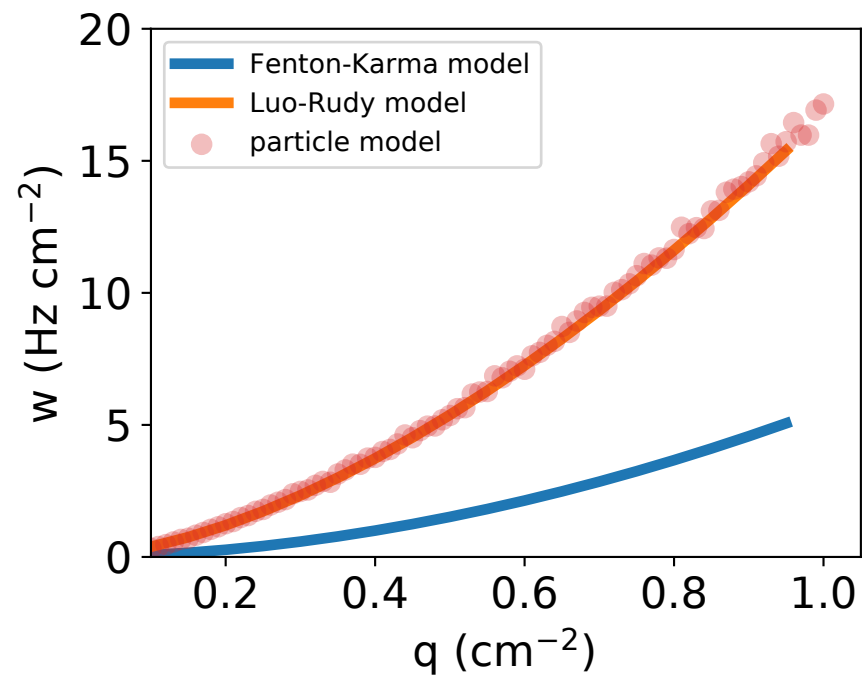
force_code=2, neighbors=0, reflect=0
 $r = 0.30489$ cm, $\kappa = 100.00000$ Hz
 $D = 0.53209$ cm²/s, $a = 14.10470$ cm²/s, $x_0 = 0$ cm



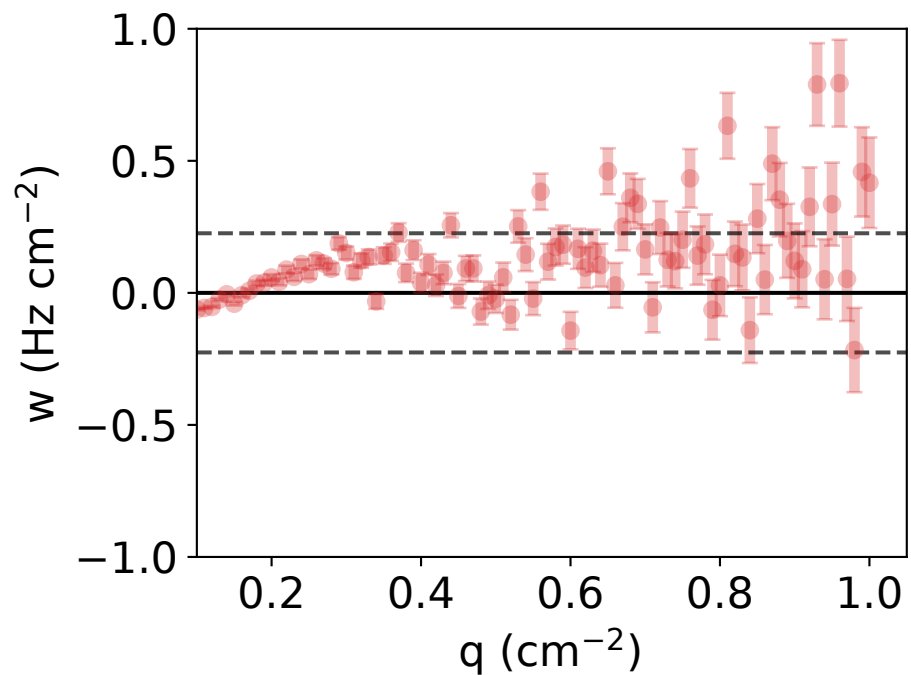
$\nu = 1.641 \pm 0.009$, $M = 16.852 \pm 0.466$ cm²($\nu - 1$)/s
 $RMSE_{particle \text{ vs full}} = 0.222$ Hz/cm²



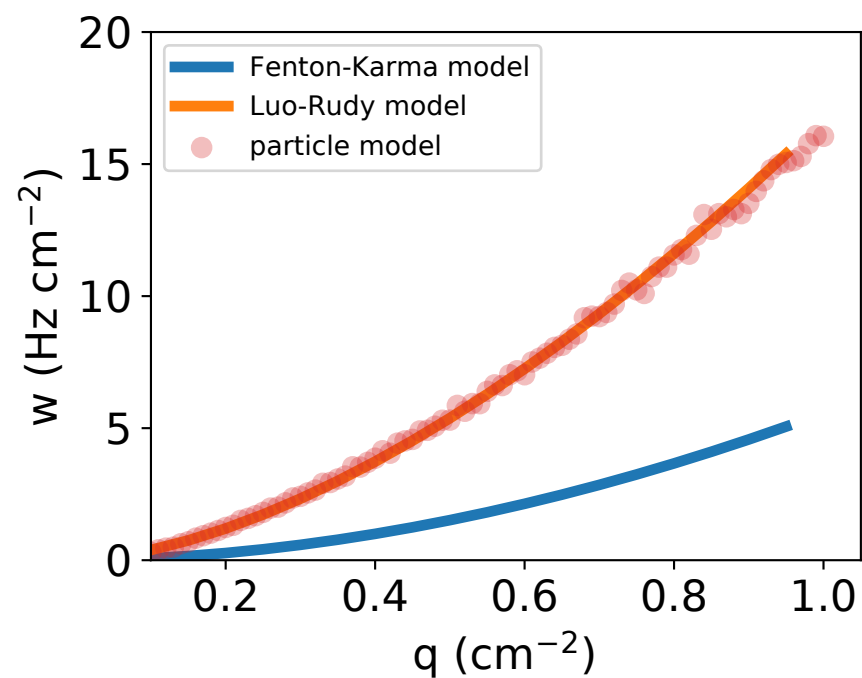
force_code=2, neighbors=0, reflect=0
 $r = 0.20717$ cm, $\kappa = 200.00000$ Hz
 $D = 0.44778$ cm²/s, $a = 10.80870$ cm²/s, $x_0 = 0$ cm



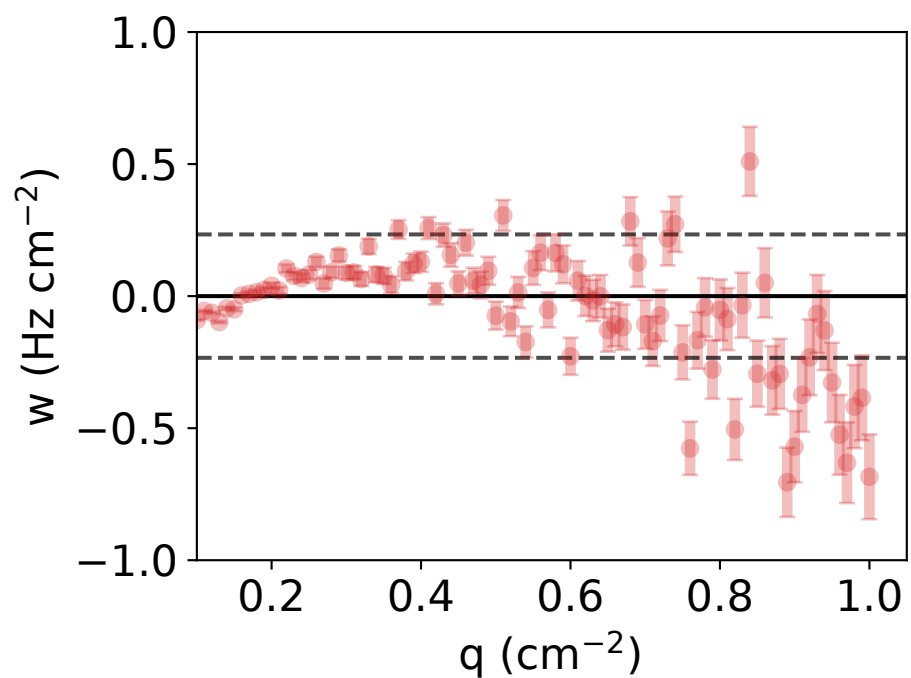
$\nu = 1.656 \pm 0.013$, $M = 16.912 \pm 0.544$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.226 Hz/cm²



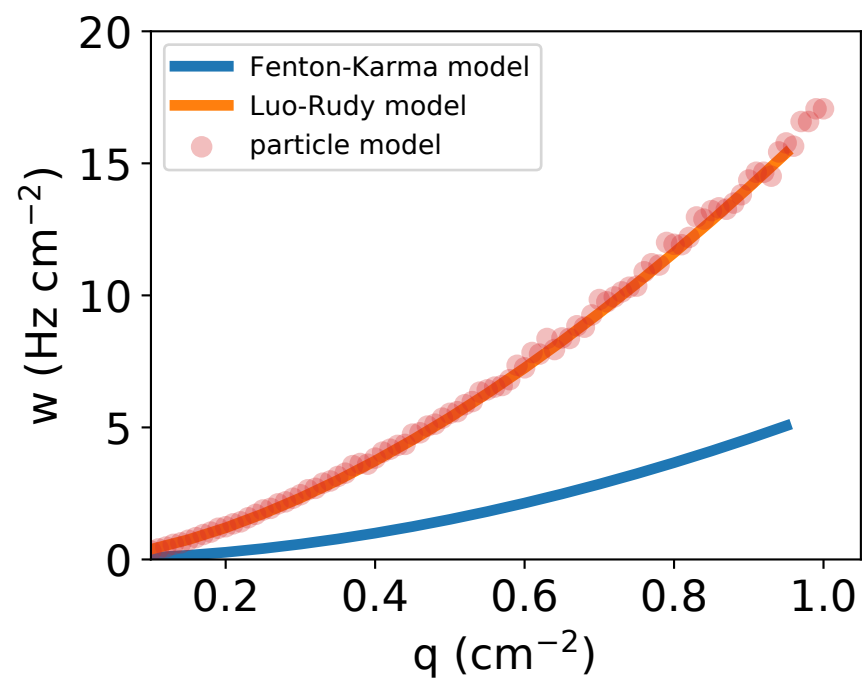
force_code=2, neighbors=0, reflect=0
 $r = 0.15668$ cm, $\kappa = 297.86900$ Hz
 $D = 0.78295$ cm²/s, $a = 9.46536$ cm²/s, $x_0 = 0$ cm



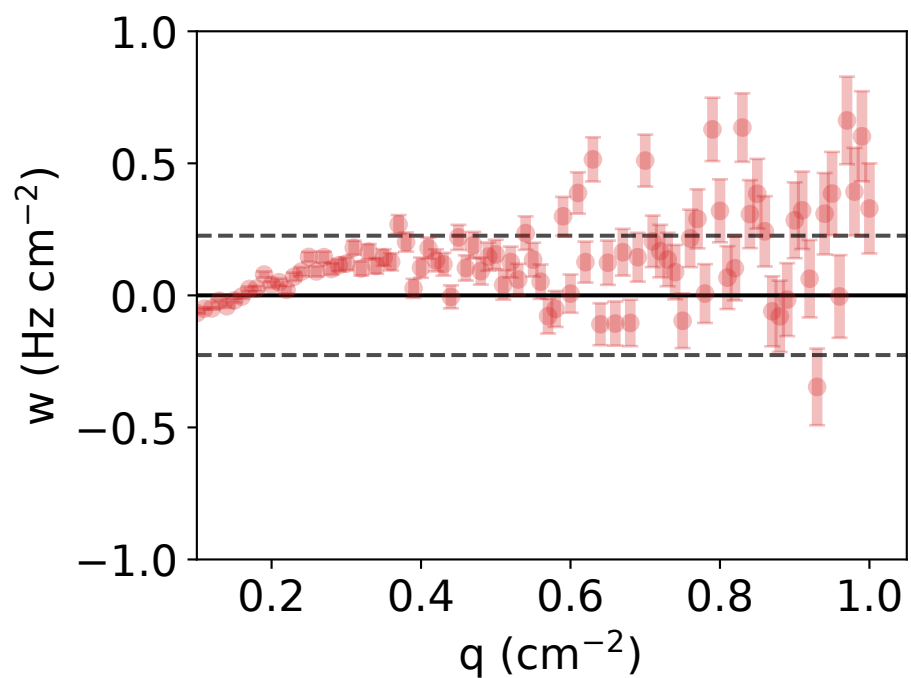
$\nu = 1.649 \pm 0.017$, $M = 16.149 \pm 0.696$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.234 Hz/cm²



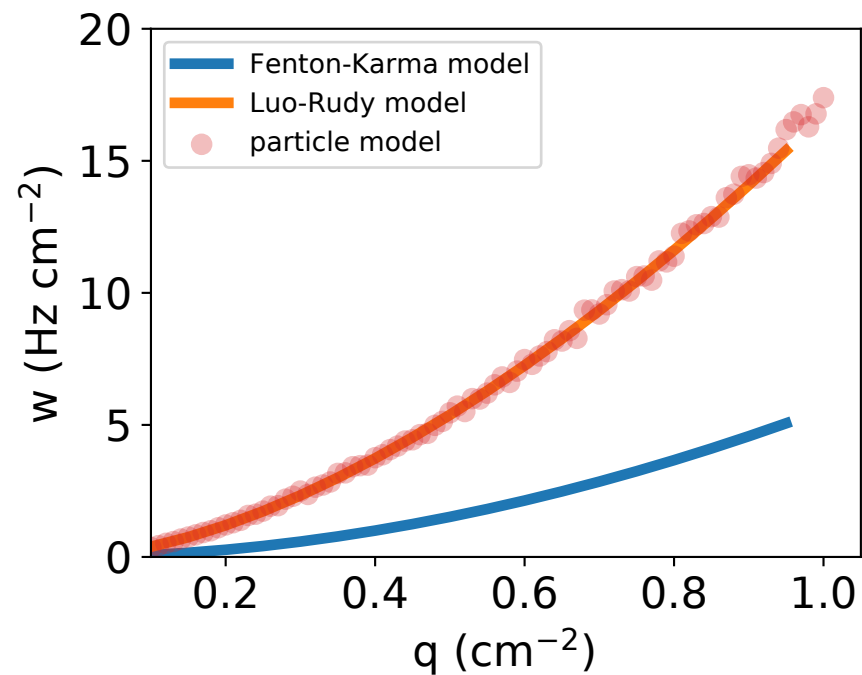
force_code=2, neighbors=0, reflect=0
 $r = 0.20686$ cm, $\kappa = 200.00000$ Hz
 $D = 0.65994$ cm²/s, $a = 10.71620$ cm²/s, $x_0 = 0$ cm



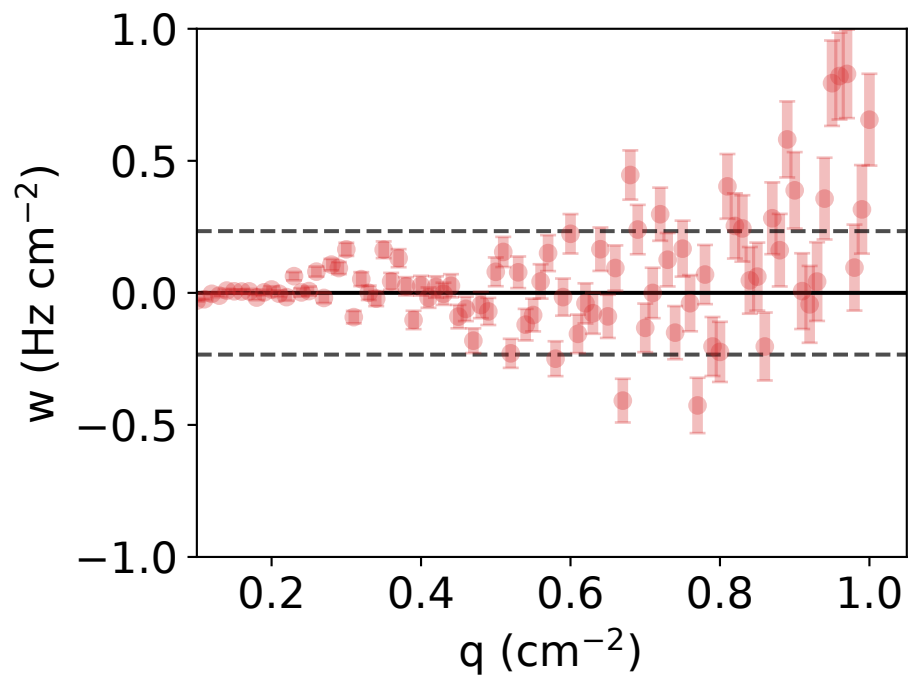
$\nu = 1.654 \pm 0.013$, $M = 16.860 \pm 0.560$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.226 Hz/cm²



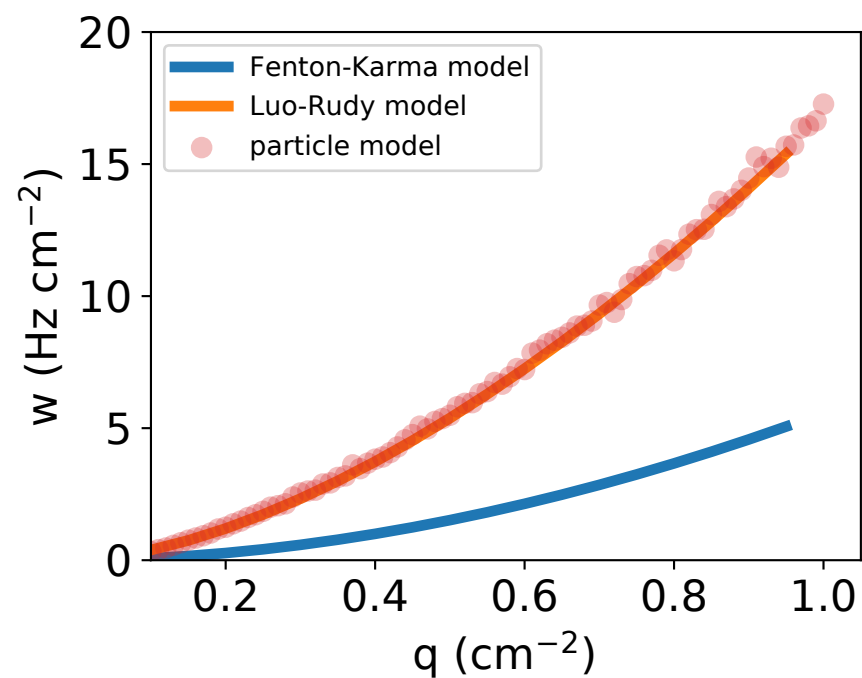
force_code=2, neighbors=0, reflect=0
 $r = 0.30539$ cm, $\kappa = 101.08700$ Hz
 $D = 0.69837$ cm²/s, $a = 13.80100$ cm²/s, $x_0 = 0$ cm



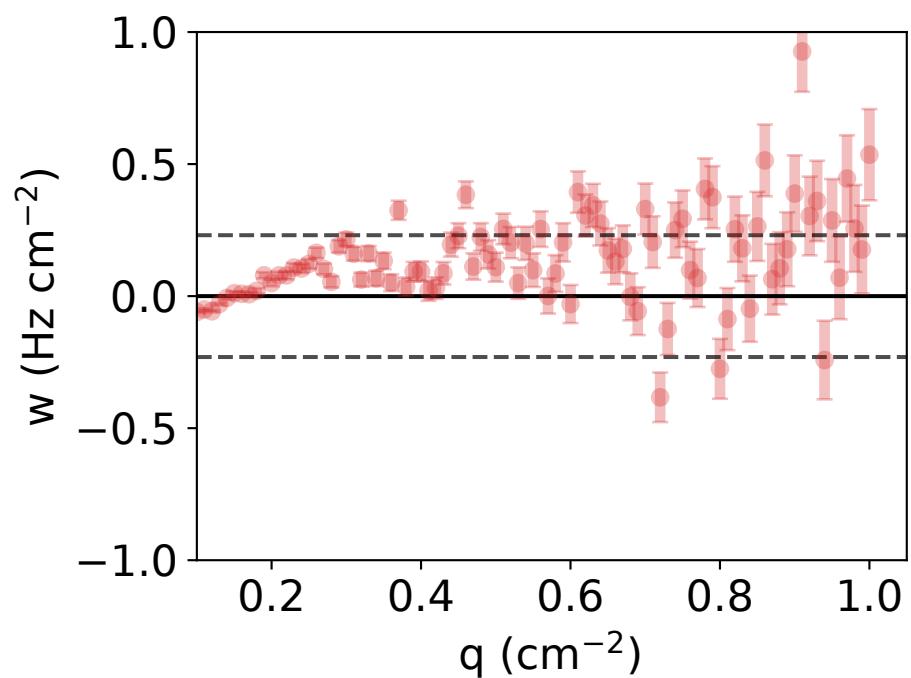
$\nu = 1.647 \pm 0.009$, $M = 17.013 \pm 0.459$ cm²($\nu - 1$)/s
 $RMSE_{particle \text{ vs full}} = 0.234$ Hz/cm²



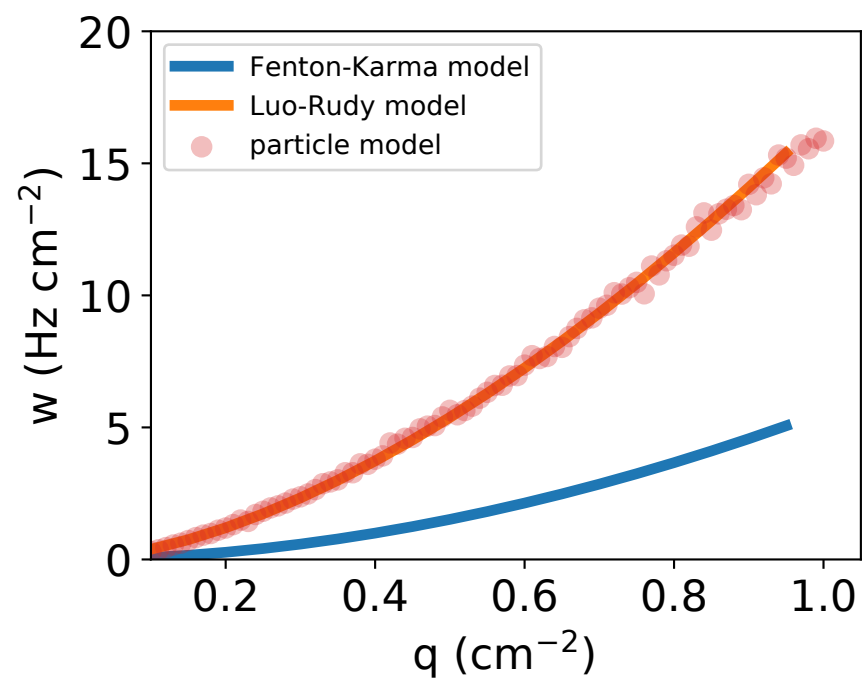
force_code=2, neighbors=0, reflect=0
 $r = 0.20679$ cm, $\kappa = 200.00000$ Hz
 $D = 0.68408$ cm²/s, $a = 10.78020$ cm²/s, $x_0 = 0$ cm



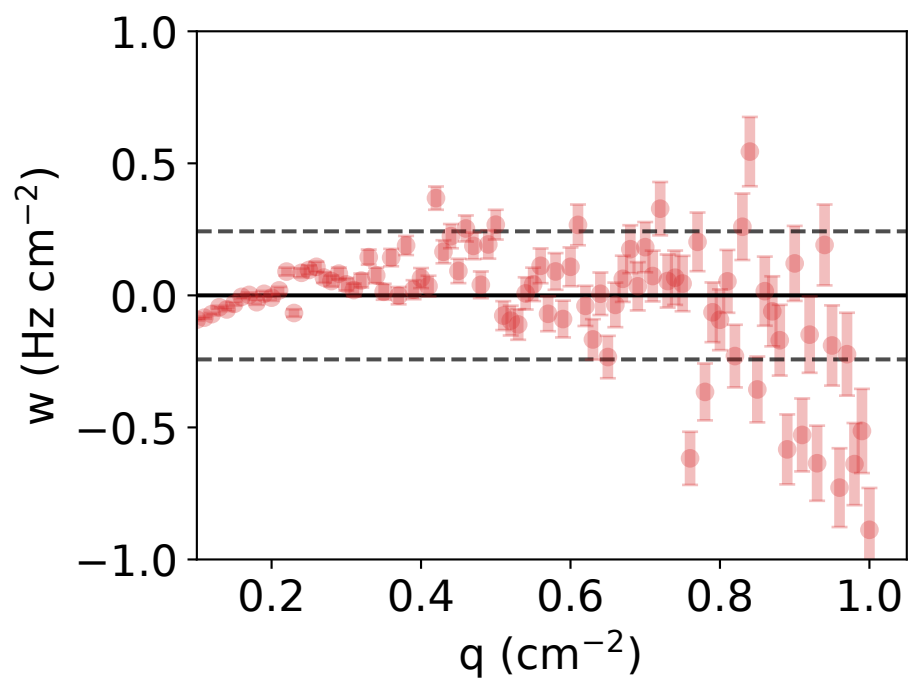
$\nu = 1.649 \pm 0.013$, $M = 16.844 \pm 0.577$ cm²($\nu - 1$)/s
 $RMSE_{particle \text{ vs full}} = 0.231$ Hz/cm²



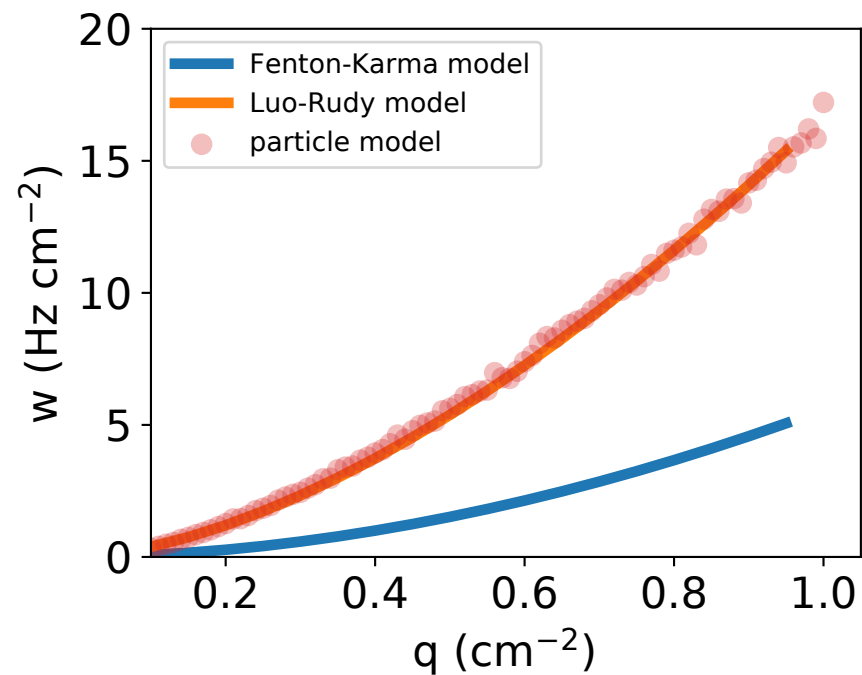
force_code=2, neighbors=0, reflect=0
 $r = 0.16220$ cm, $\kappa = 287.64600$ Hz
 $D = 0.32471$ cm²/s, $a = 9.53748$ cm²/s, $x_0 = 0$ cm



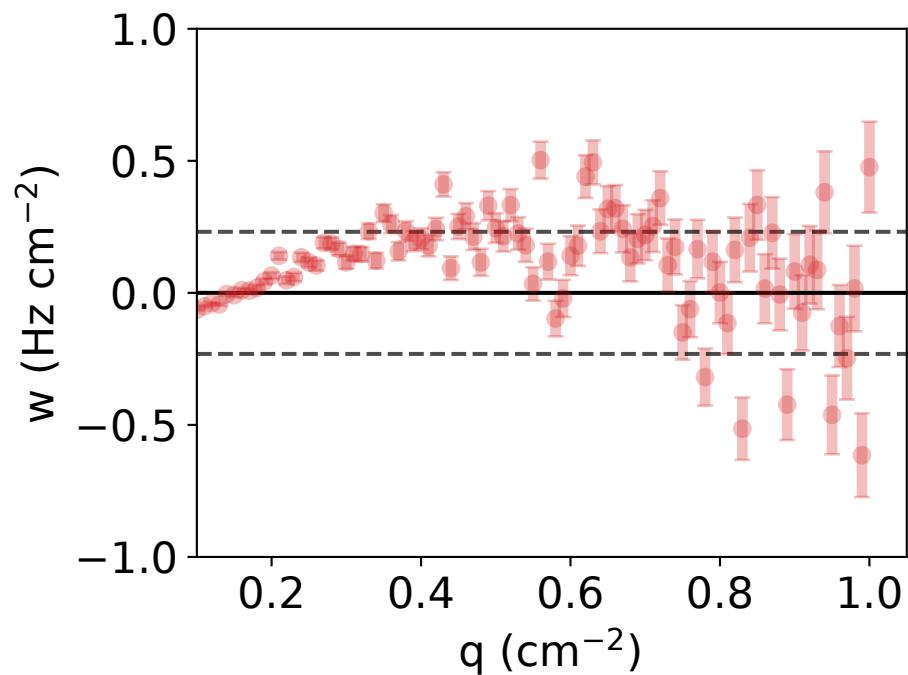
$\nu = 1.659 \pm 0.017$, $M = 16.252 \pm 0.708$ cm²($\nu - 1$)/s
 $RMSE_{particle \text{ vs full}} = 0.242$ Hz/cm²



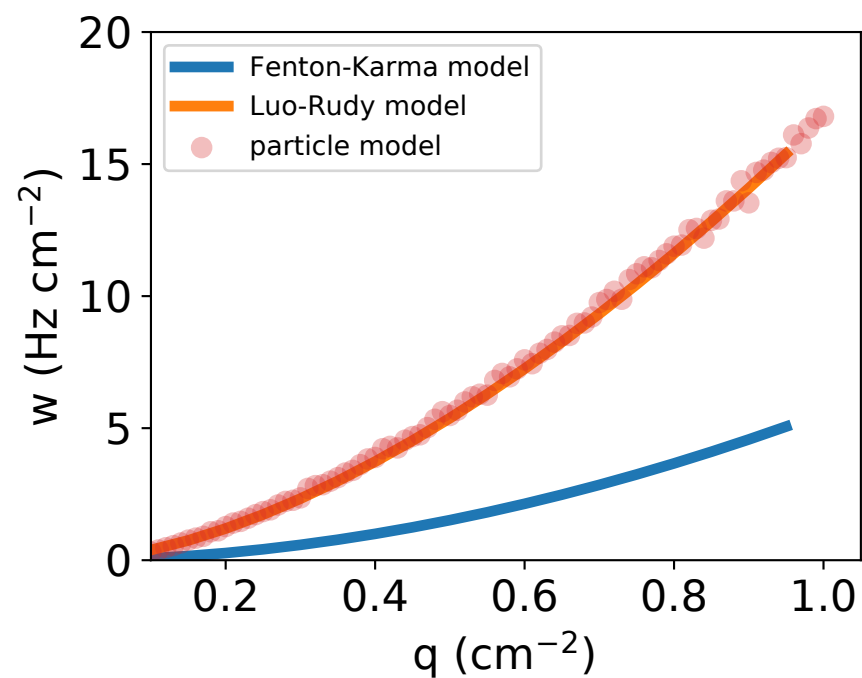
force_code=2, neighbors=0, reflect=0
 $r = 0.16042$ cm, $\kappa = 296.73200$ Hz
 $D = 0.19346$ cm²/s, $a = 10.15930$ cm²/s, $x_0 = 0$ cm



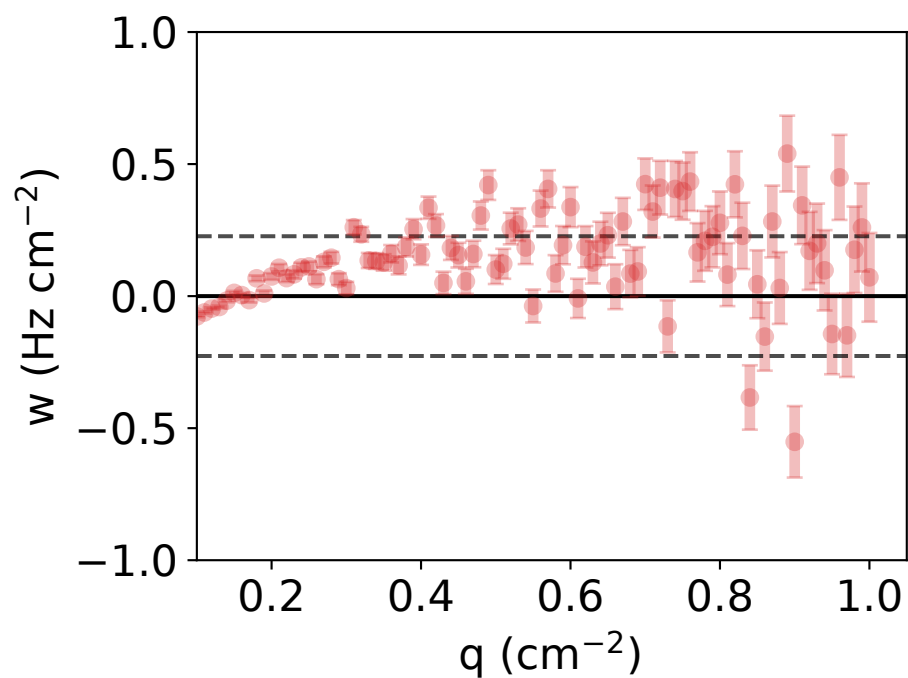
$\nu = 1.640 \pm 0.015$, $M = 16.484 \pm 0.656$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.231 Hz/cm²



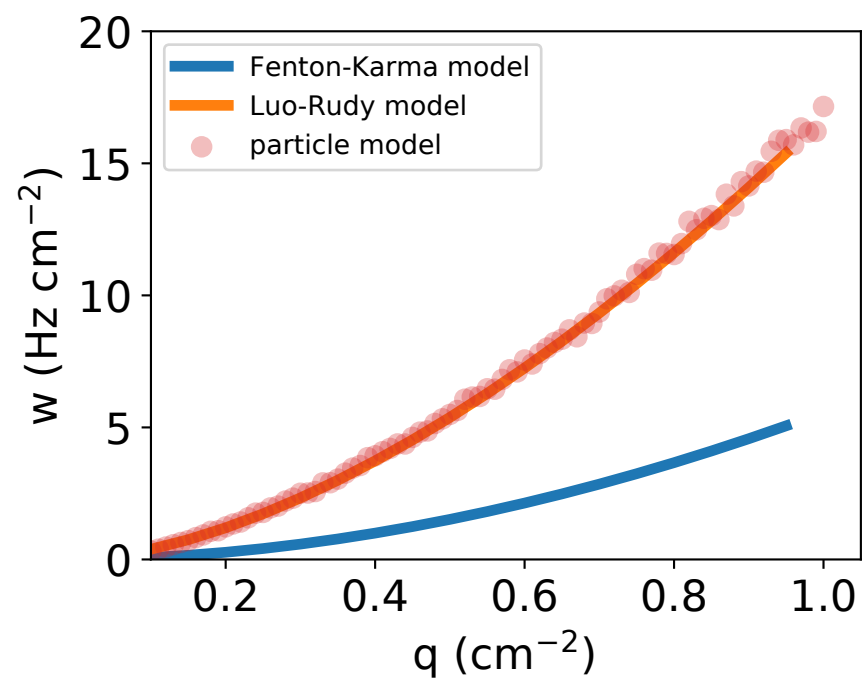
force_code=2, neighbors=0, reflect=0
 $r = 0.17998$ cm, $\kappa = 250.00000$ Hz
 $D = 0.78506$ cm²/s, $a = 10.12760$ cm²/s, $x_0 = 0$ cm



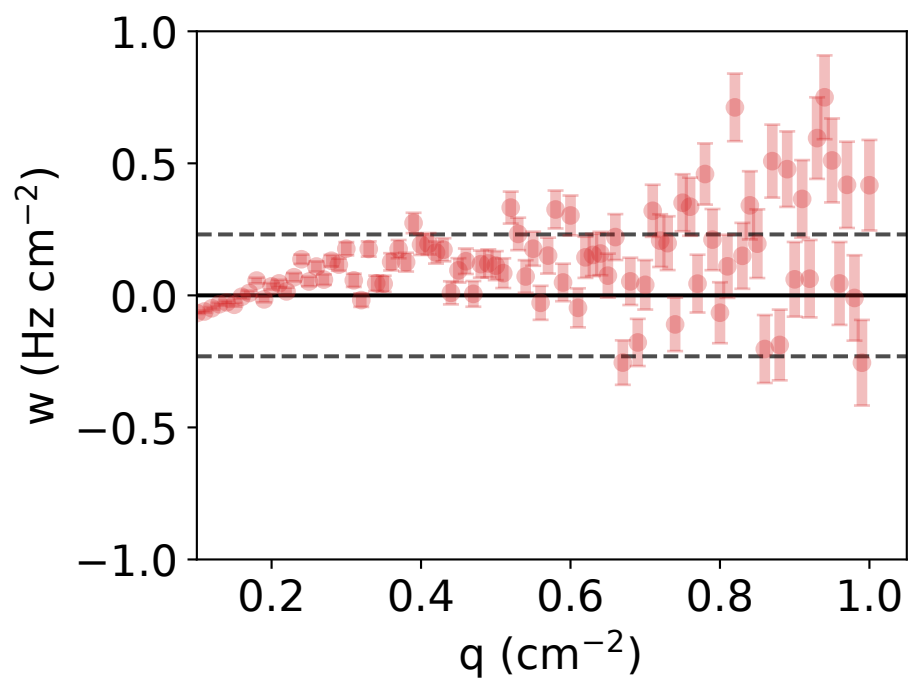
$\nu = 1.652 \pm 0.015$, $M = 16.707 \pm 0.635$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.227 Hz/cm²



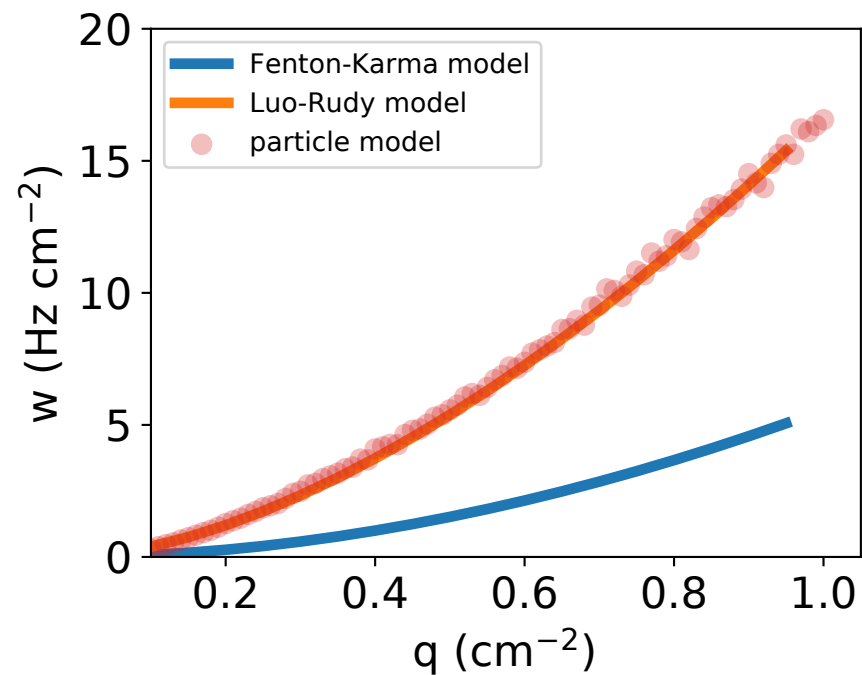
force_code=2, neighbors=0, reflect=0
 $r = 0.20384$ cm, $\kappa = 206.28100$ Hz
 $D = 0.50000$ cm²/s, $a = 10.59820$ cm²/s, $x_0 = 0$ cm



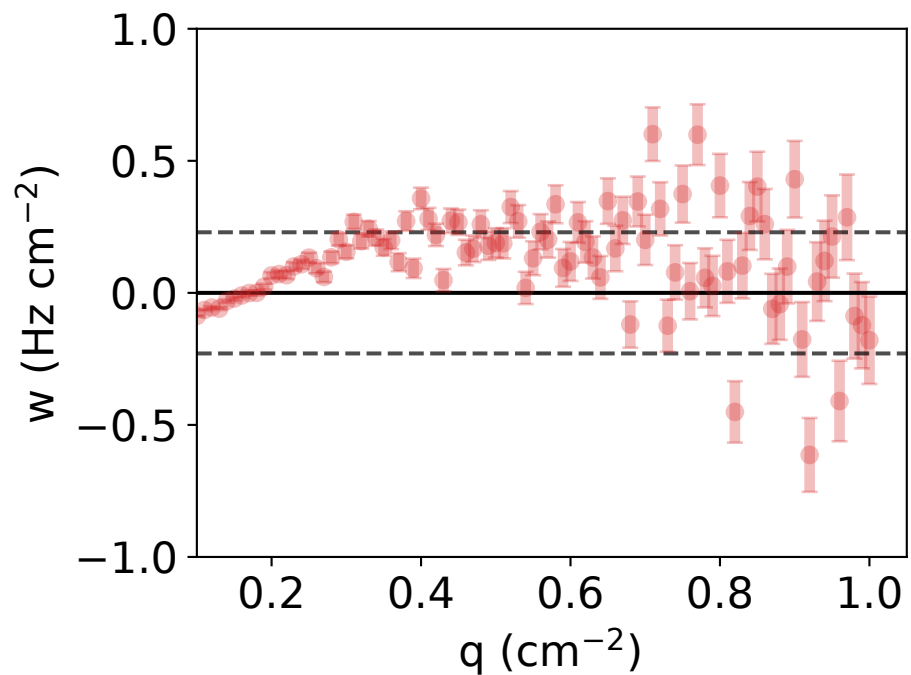
$\nu = 1.660 \pm 0.013$, $M = 16.866 \pm 0.566$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.231 Hz/cm²



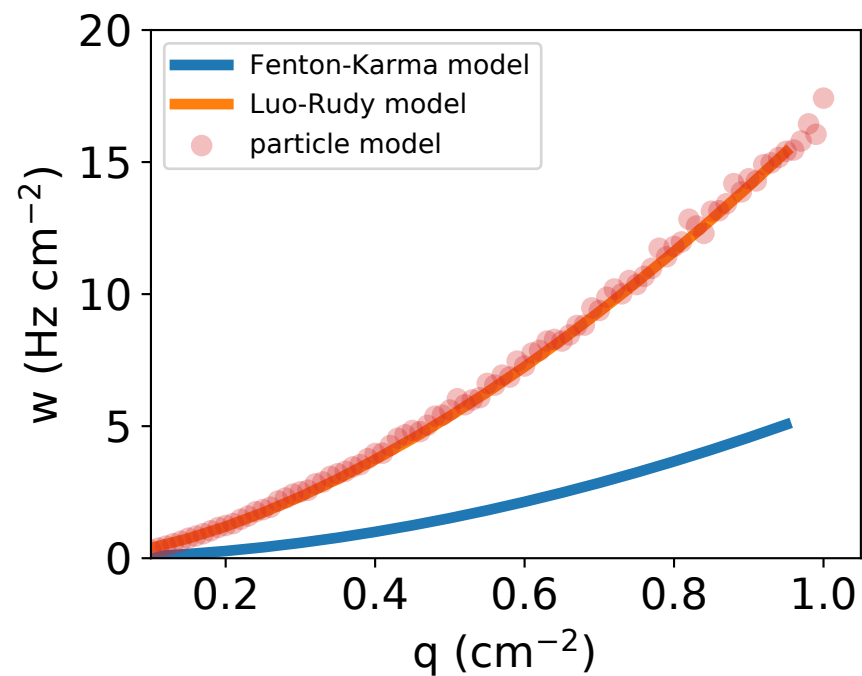
force_code=2, neighbors=0, reflect=0
 $r = 0.15825$ cm, $\kappa = 306.22400$ Hz
 $D = 0.60311$ cm²/s, $a = 9.57229$ cm²/s, $x_0 = 0$ cm



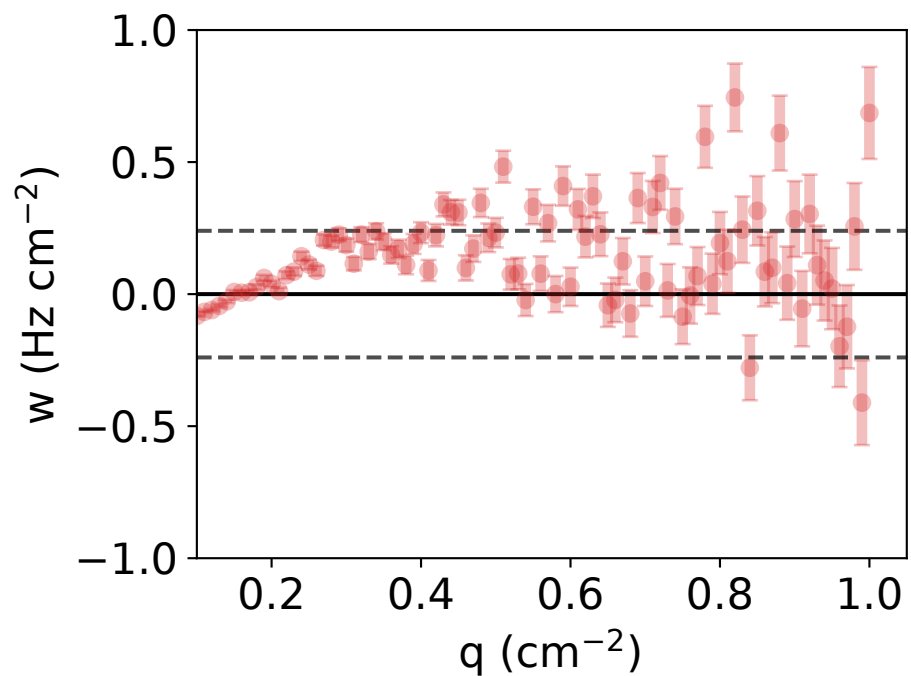
$\nu = 1.655 \pm 0.017$, $M = 16.546 \pm 0.713$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.229 Hz/cm²



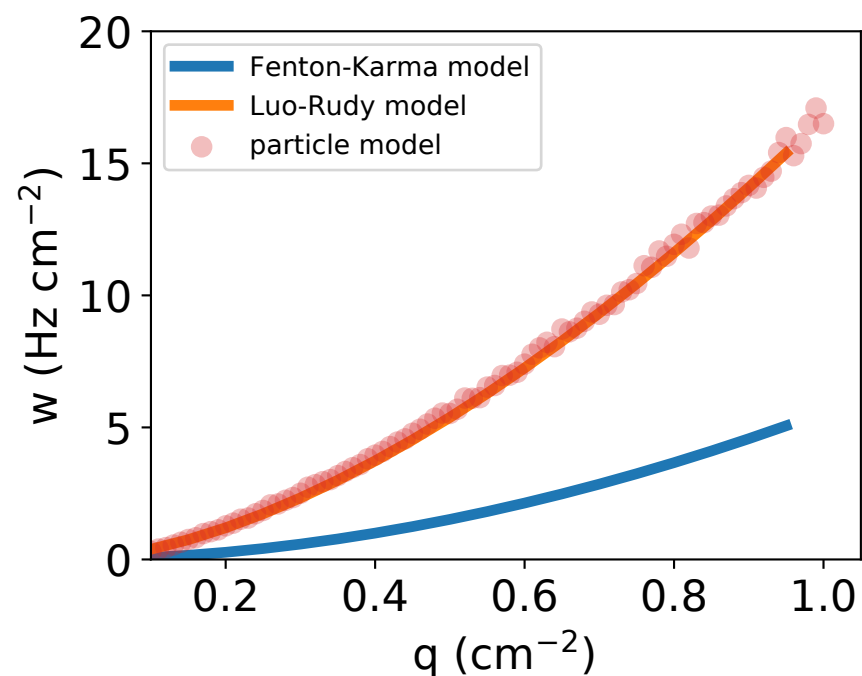
force_code=2, neighbors=0, reflect=0
 $r = 0.15995$ cm, $\kappa = 300.00000$ Hz
 $D = 0.59008$ cm²/s, $a = 9.66305$ cm²/s, $x_0 = 0$ cm



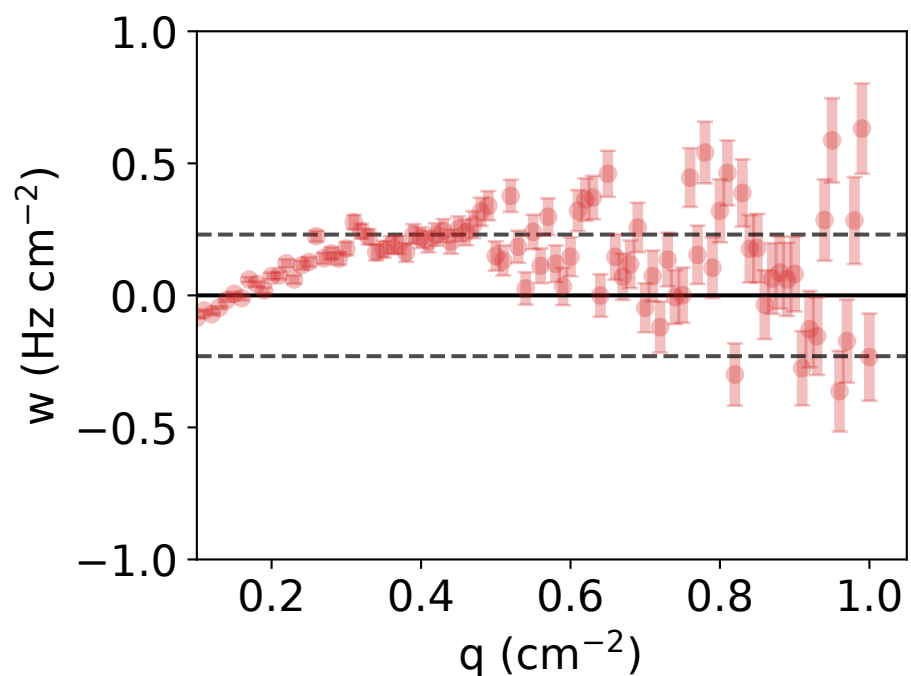
$\nu = 1.653 \pm 0.017$, $M = 16.665 \pm 0.700$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.240 Hz/cm²



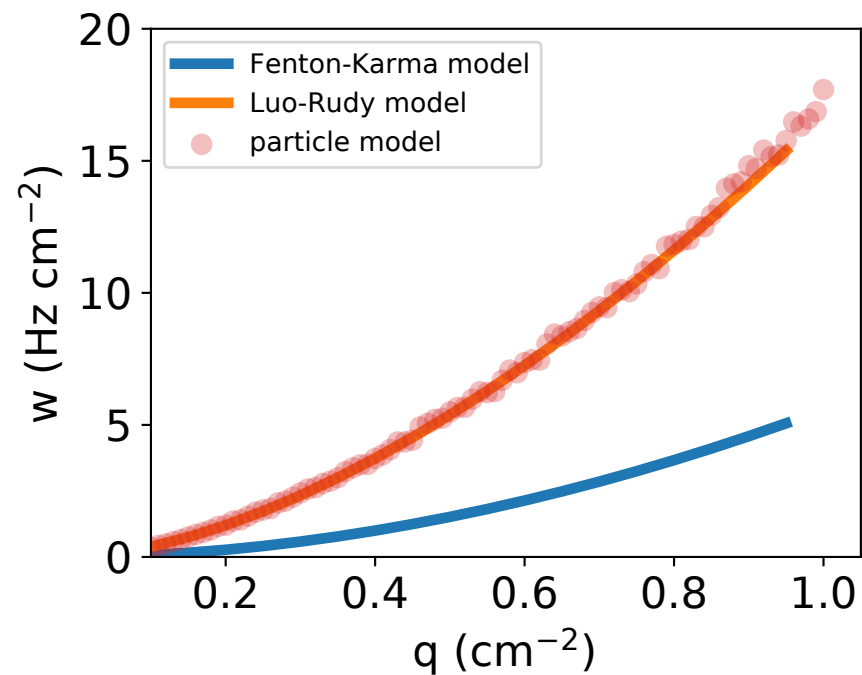
force_code=2, neighbors=0, reflect=0
 $r = 0.15938$ cm, $\kappa = 298.99000$ Hz
 $D = 0.50202$ cm²/s, $a = 9.80797$ cm²/s, $x_0 = 0$ cm



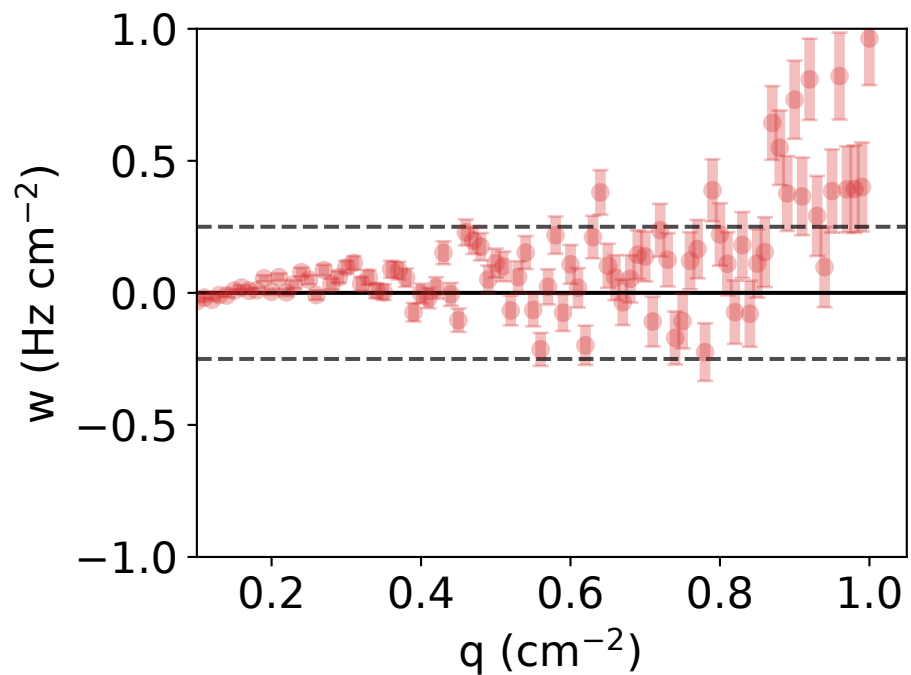
$\nu = 1.648 \pm 0.017$, $M = 16.595 \pm 0.705$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.230 Hz/cm²



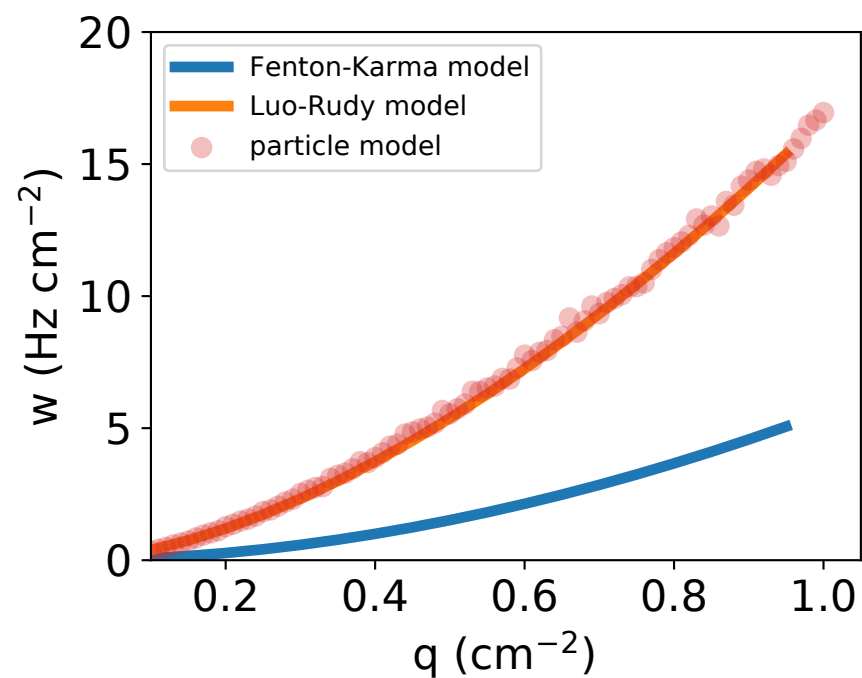
force_code=2, neighbors=0, reflect=0
 $r = 0.30563$ cm, $\kappa = 100.00000$ Hz
 $D = 0.27320$ cm²/s, $a = 14.39920$ cm²/s, $x_0 = 0$ cm



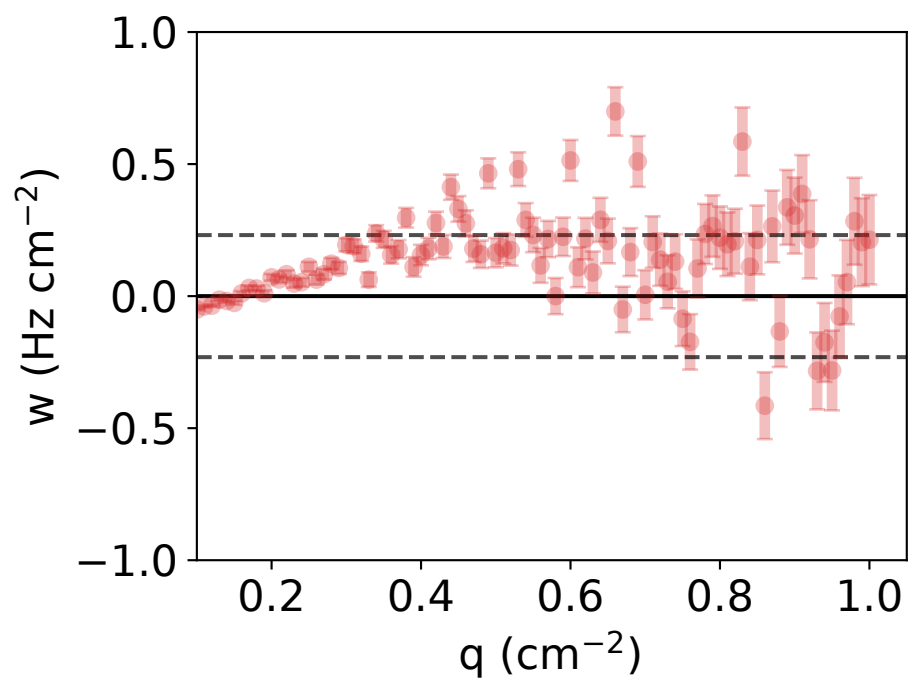
$\nu = 1.650 \pm 0.008$, $M = 17.112 \pm 0.409$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.250 Hz/cm²



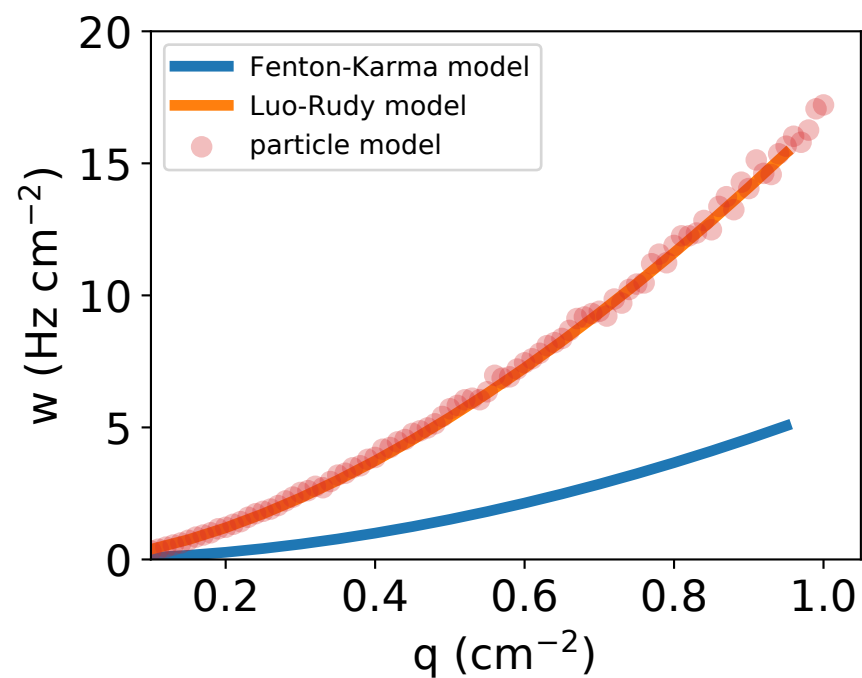
force_code=2, neighbors=0, reflect=0
 $r = 0.12307$ cm, $\kappa = 399.92600$ Hz
 $D = 0.00010$ cm²/s, $a = 17.03970$ cm²/s, $x_0 = 0$ cm



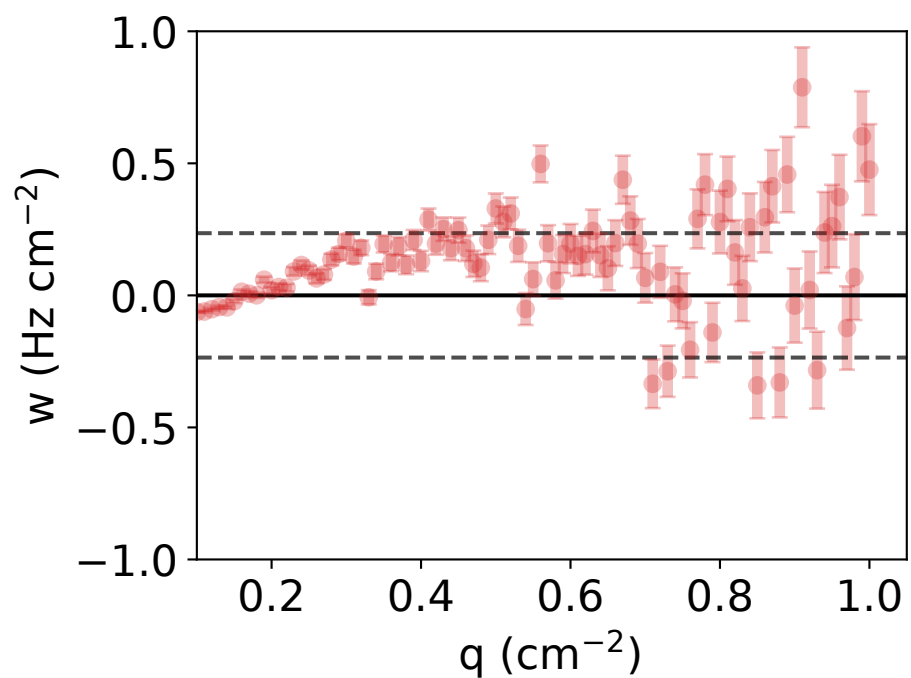
$\nu = 1.644 \pm 0.013$, $M = 16.674 \pm 0.568$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.231 Hz/cm²



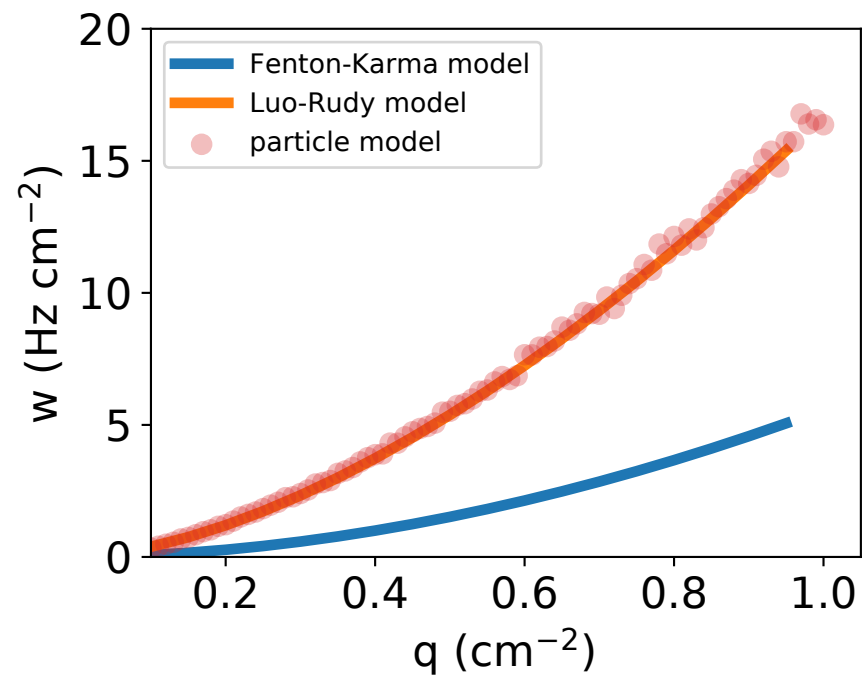
force_code=2, neighbors=0, reflect=0
 $r = 0.17757$ cm, $\kappa = 255.67400$ Hz
 $D = 0.30757$ cm²/s, $a = 10.10520$ cm²/s, $x_0 = 0$ cm



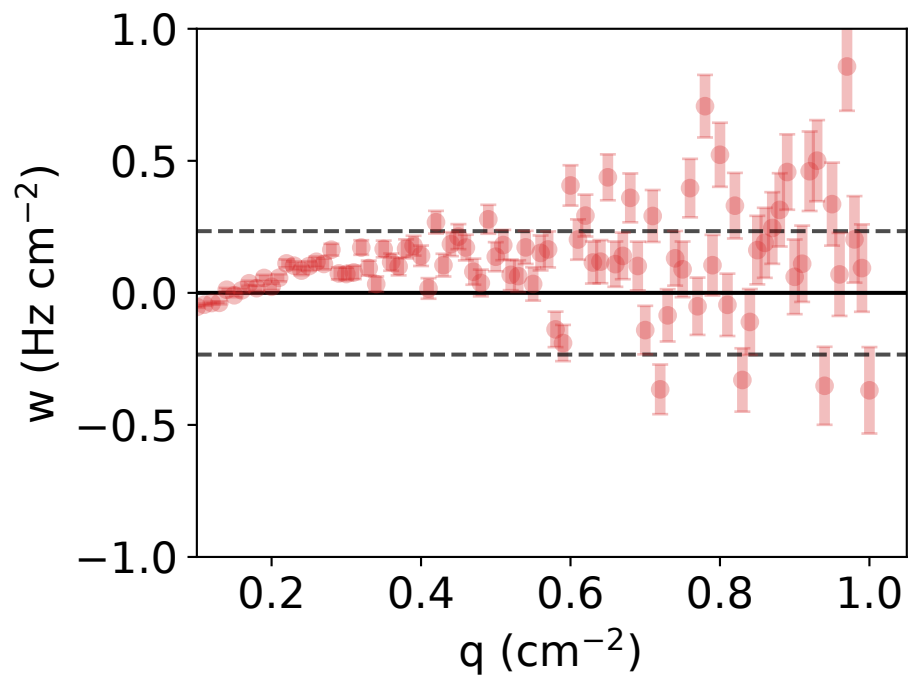
$\nu = 1.656 \pm 0.014$, $M = 16.739 \pm 0.620$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.236 Hz/cm²



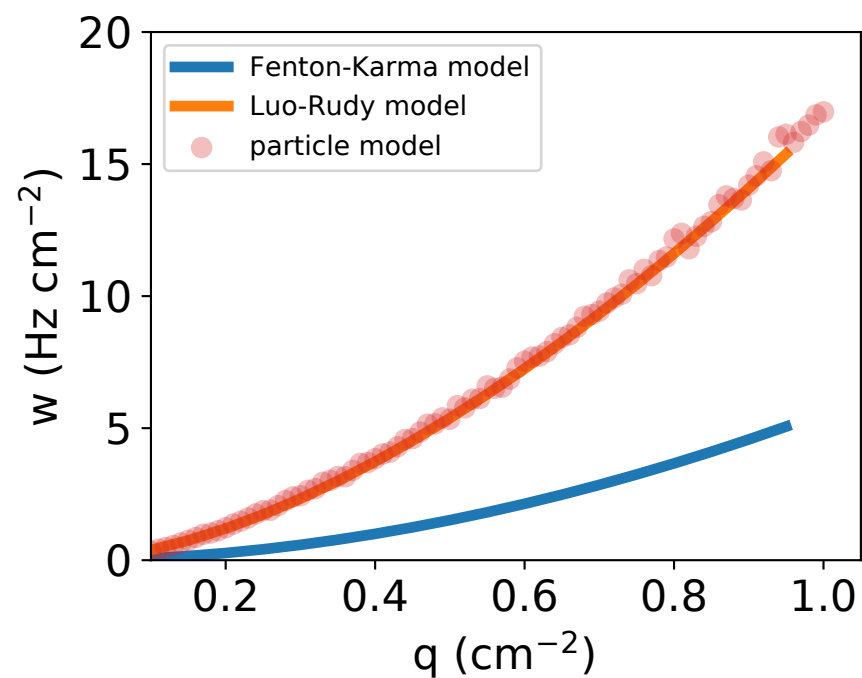
force_code=2, neighbors=0, reflect=0
 $r = 0.20674$ cm, $\kappa = 200.00000$ Hz
 $D = 0.70000$ cm²/s, $a = 10.74040$ cm²/s, $x_0 = 0$ cm



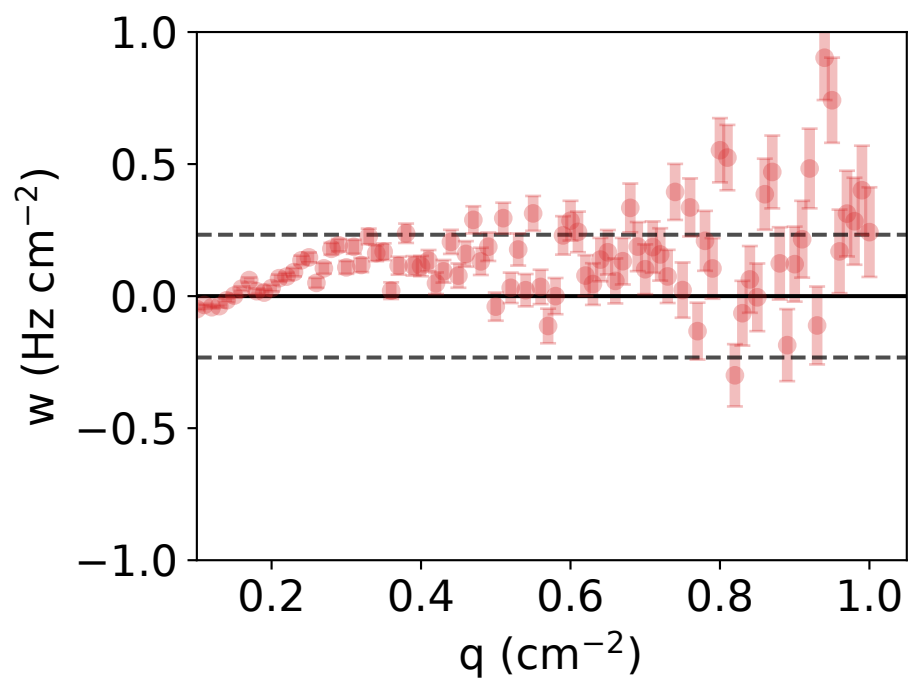
$\nu = 1.646 \pm 0.012$, $M = 16.799 \pm 0.551$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.234 Hz/cm²



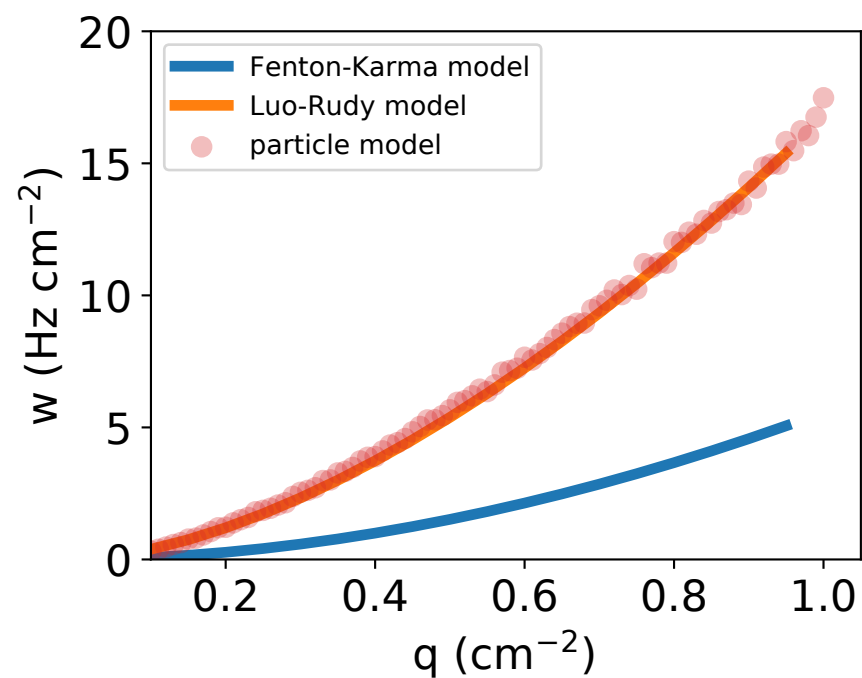
force_code=2, neighbors=0, reflect=0
 $r = 0.20775$ cm, $\kappa = 200.00000$ Hz
 $D = 0.35687$ cm²/s, $a = 11.02140$ cm²/s, $x_0 = 0$ cm



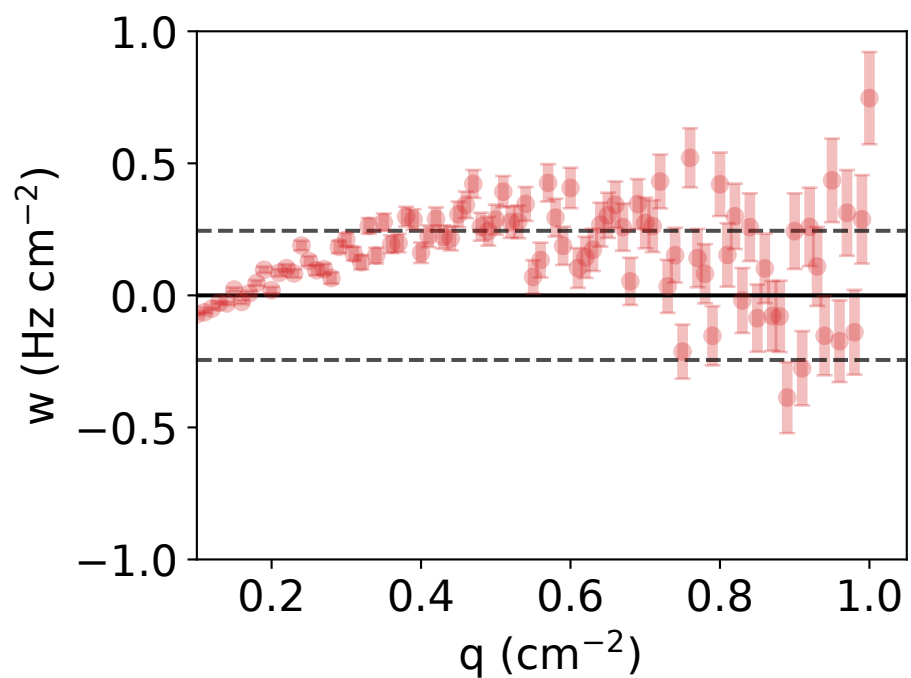
$\nu = 1.645 \pm 0.012$, $M = 16.879 \pm 0.526$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.232 Hz/cm²



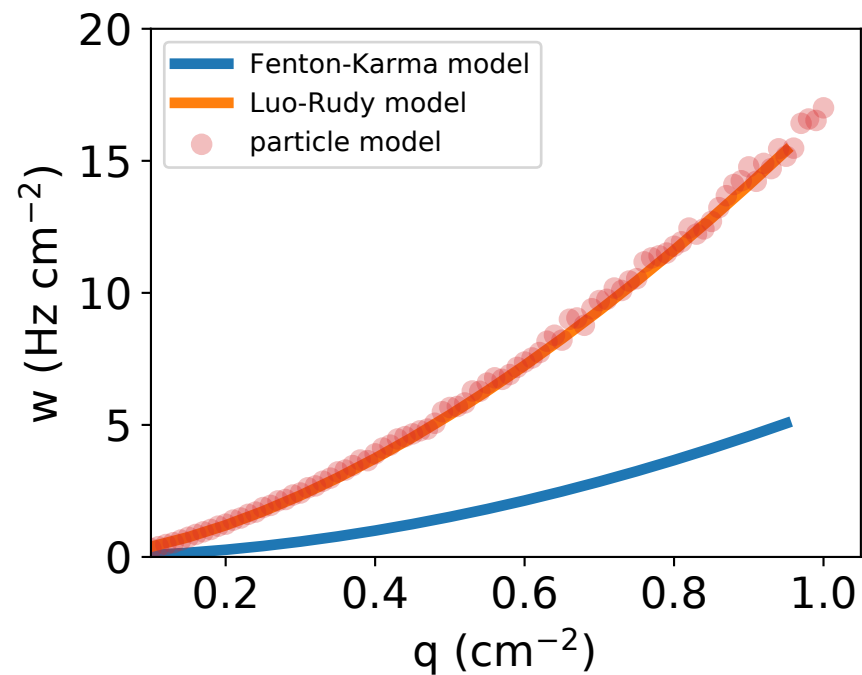
force_code=2, neighbors=0, reflect=0
 $r = 0.15963$ cm, $\kappa = 300.00000$ Hz
 $D = 0.74912$ cm²/s, $a = 9.81757$ cm²/s, $x_0 = 0$ cm



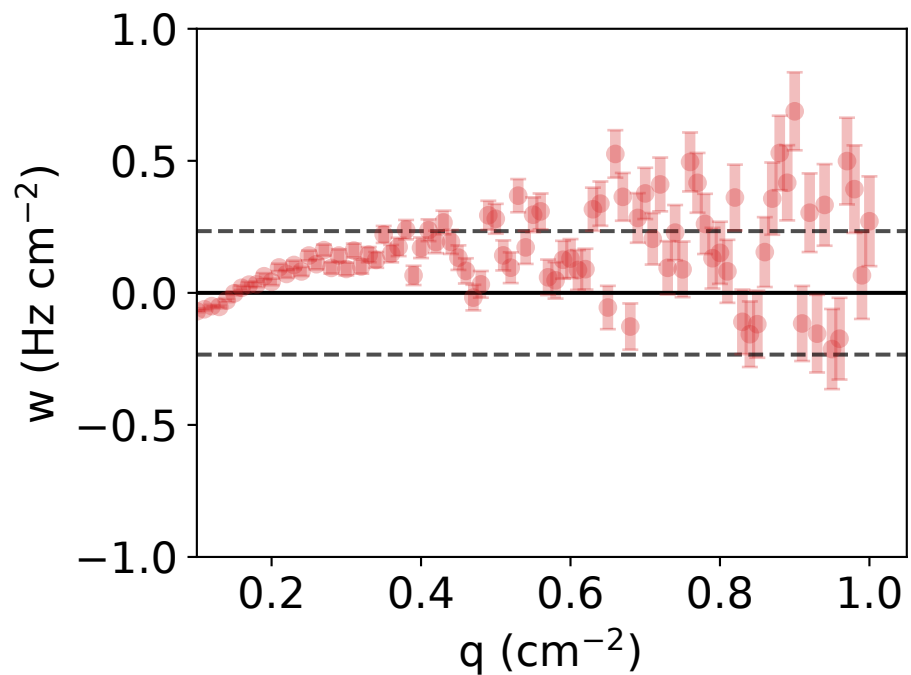
$\nu = 1.648 \pm 0.016$, $M = 16.627 \pm 0.678$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.245 Hz/cm²



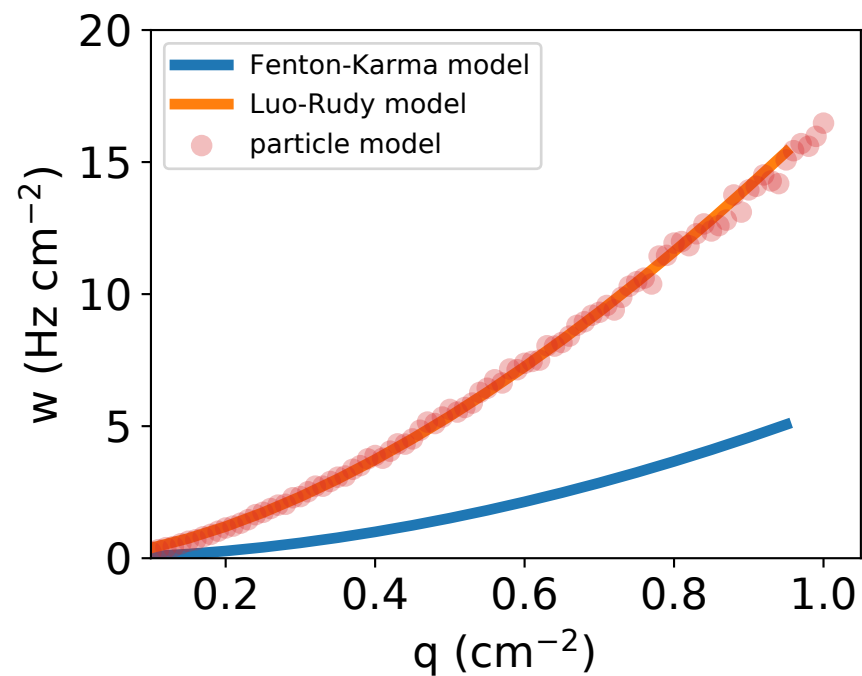
force_code=2, neighbors=0, reflect=0
 $r = 0.18865$ cm, $\kappa = 232.21000$ Hz
 $D = 0.70000$ cm²/s, $a = 10.47810$ cm²/s, $x_0 = 0$ cm



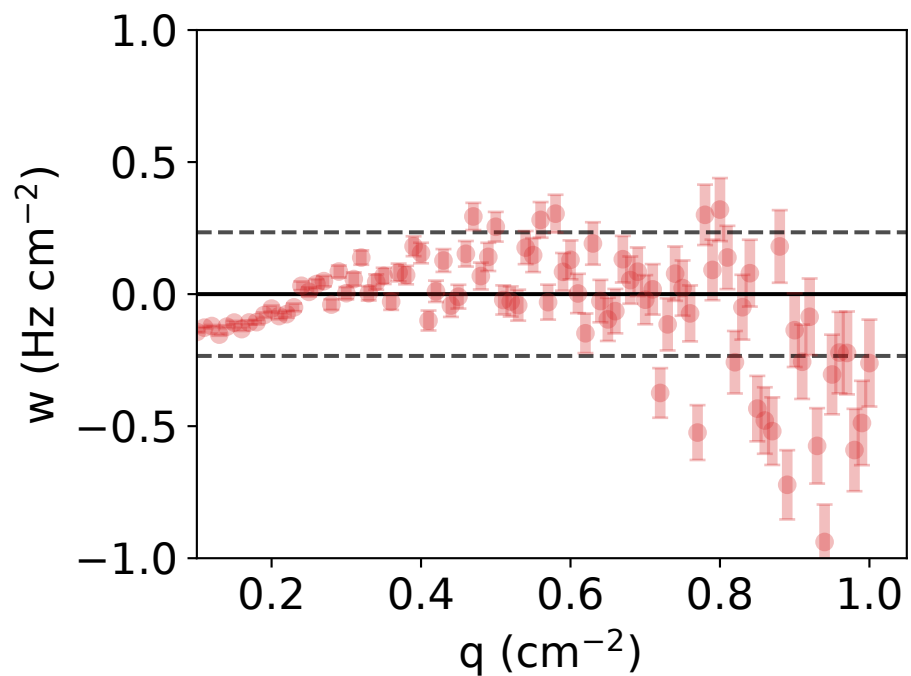
$\nu = 1.653 \pm 0.014$, $M = 16.787 \pm 0.607$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.234 Hz/cm²



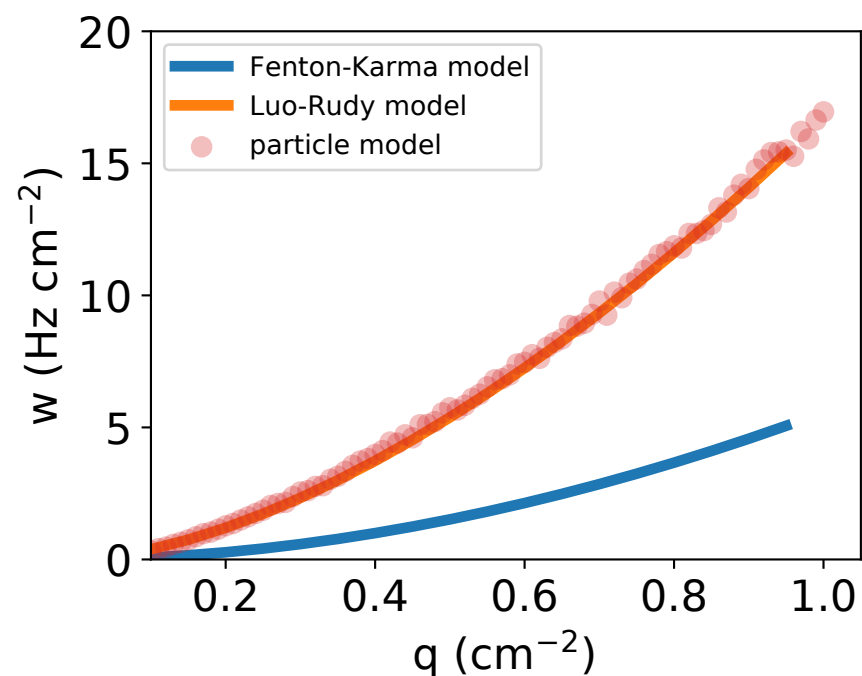
force_code=2, neighbors=0, reflect=0
 $r = 0.10516$ cm, $\kappa = 581.98300$ Hz
 $D = 0.54099$ cm²/s, $a = 7.32405$ cm²/s, $x_0 = 0$ cm



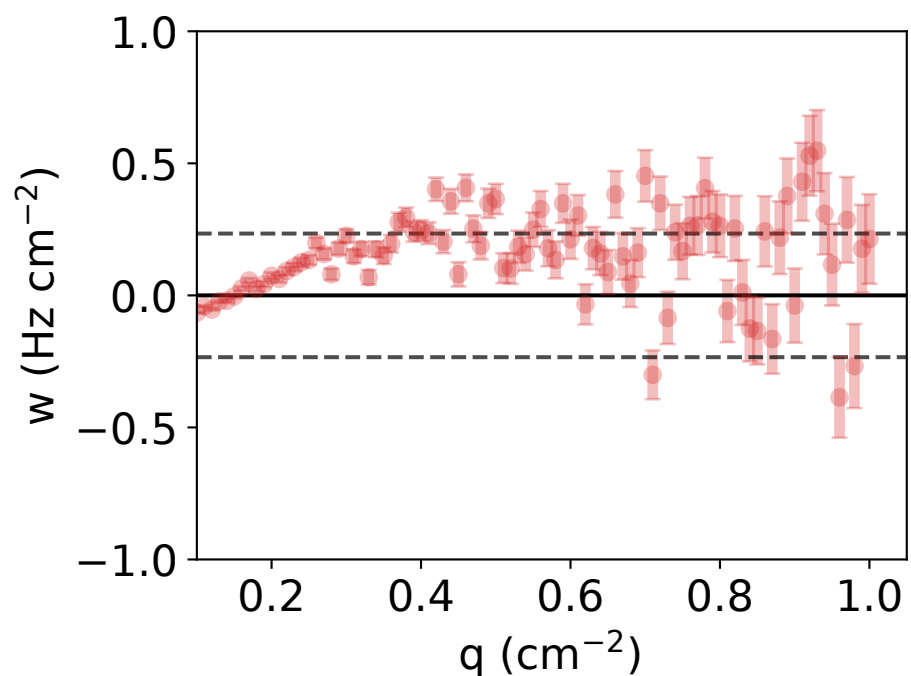
$\nu = 1.719 \pm 0.023$, $M = 16.179 \pm 0.933$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.234 Hz/cm²



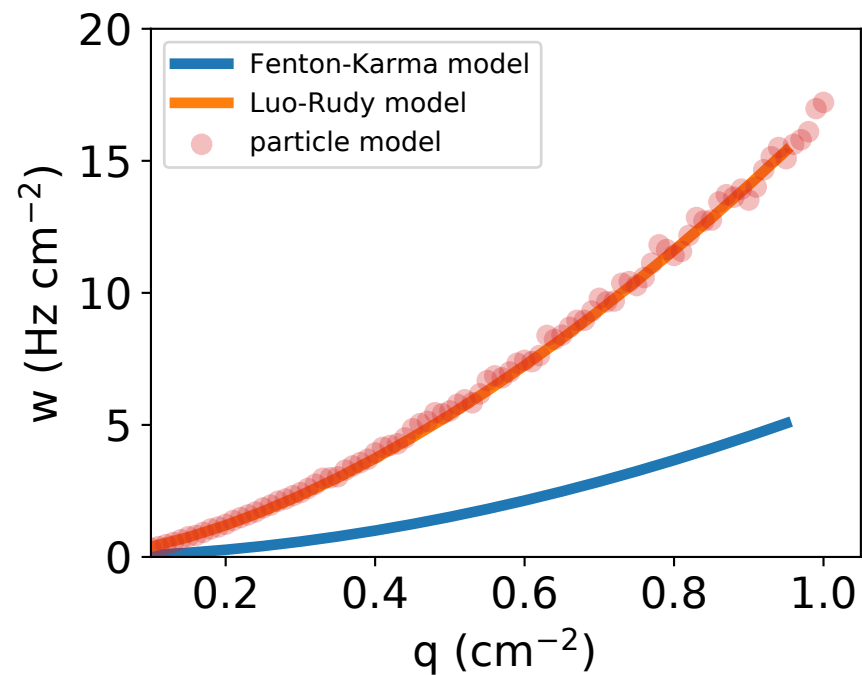
force_code=2, neighbors=0, reflect=0
 $r = 0.16101$ cm, $\kappa = 300.00000$ Hz
 $D = 0.32366$ cm²/s, $a = 10.04480$ cm²/s, $x_0 = 0$ cm



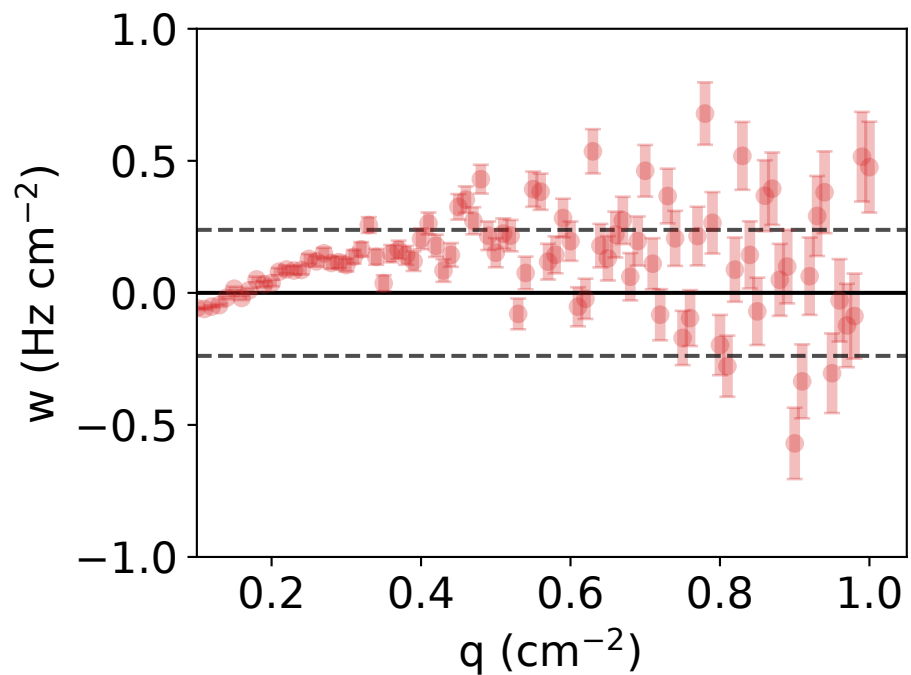
$\nu = 1.642 \pm 0.015$, $M = 16.683 \pm 0.622$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.234 Hz/cm²



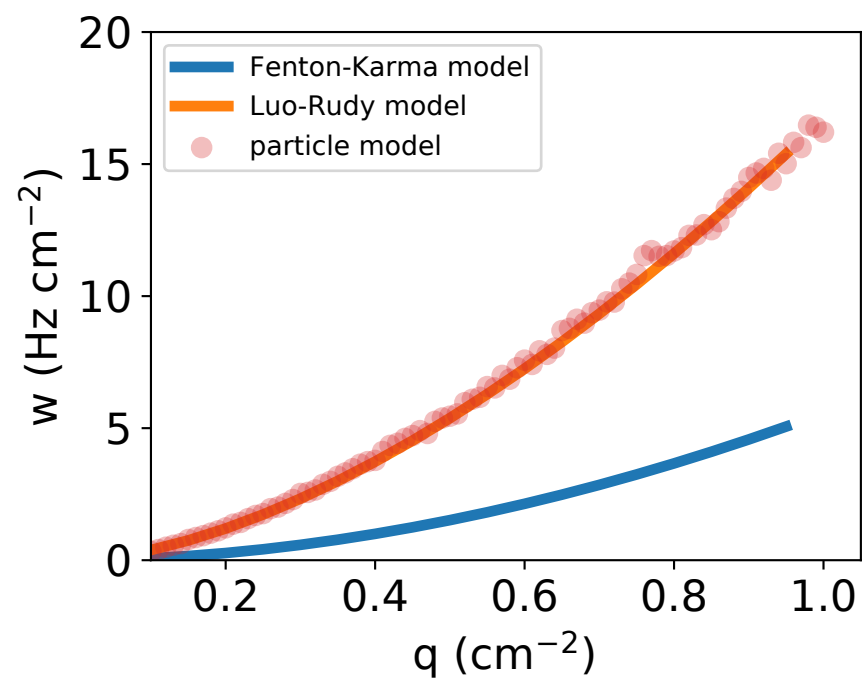
force_code=2, neighbors=0, reflect=0
 $r = 0.17866$ cm, $\kappa = 251.02200$ Hz
 $D = 0.20613$ cm²/s, $a = 10.47540$ cm²/s, $x_0 = 0$ cm



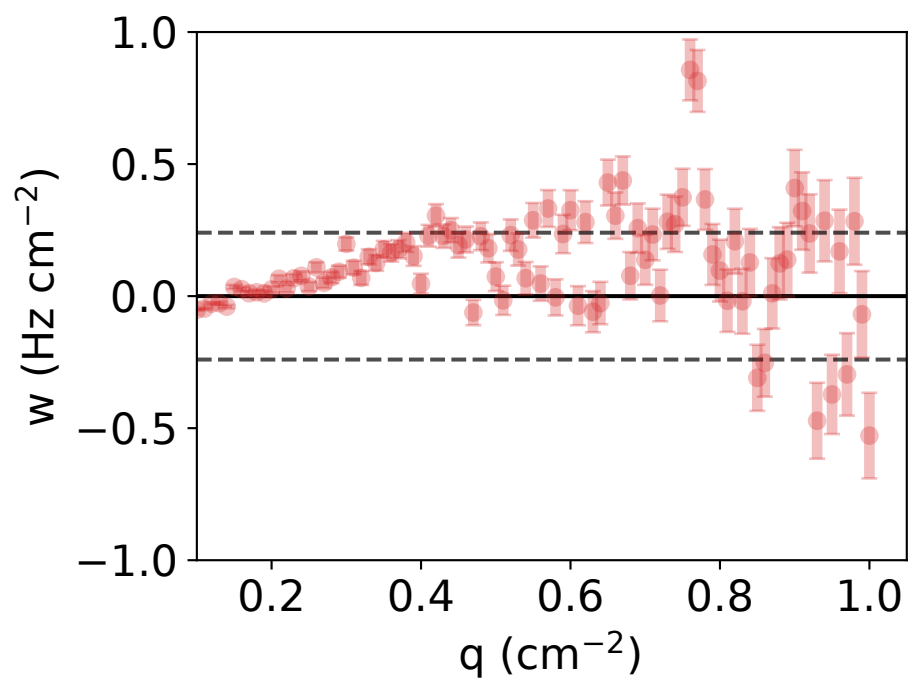
$\nu = 1.648 \pm 0.014$, $M = 16.652 \pm 0.634$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.239 Hz/cm²



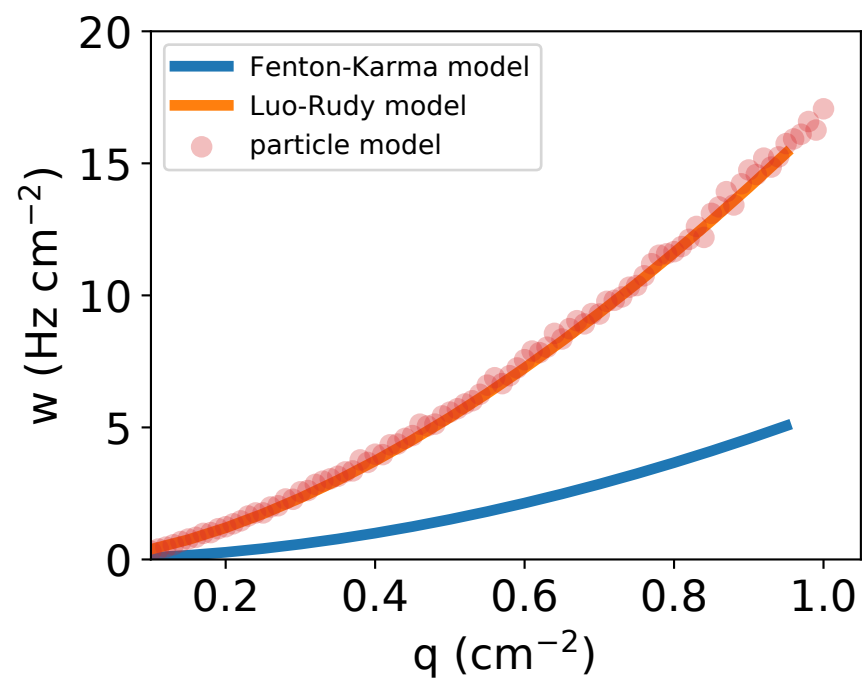
force_code=2, neighbors=0, reflect=0
 $r = 0.14914$ cm, $\kappa = 300.14700$ Hz
 $D = 0.00018$ cm²/s, $a = 18.12490$ cm²/s, $x_0 = 0$ cm



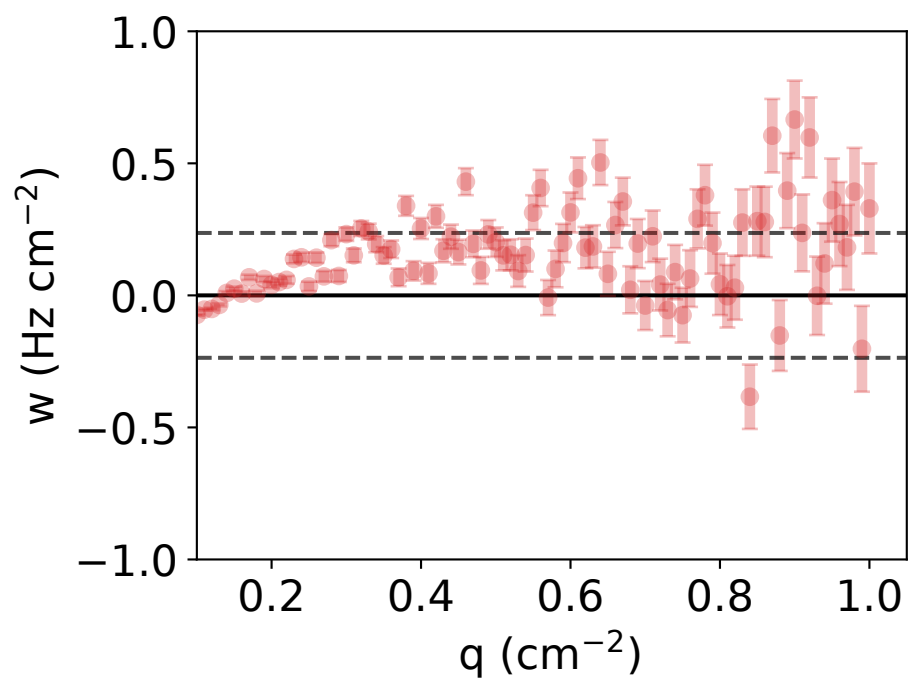
$\nu = 1.647 \pm 0.012$, $M = 16.671 \pm 0.569$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.240 Hz/cm²



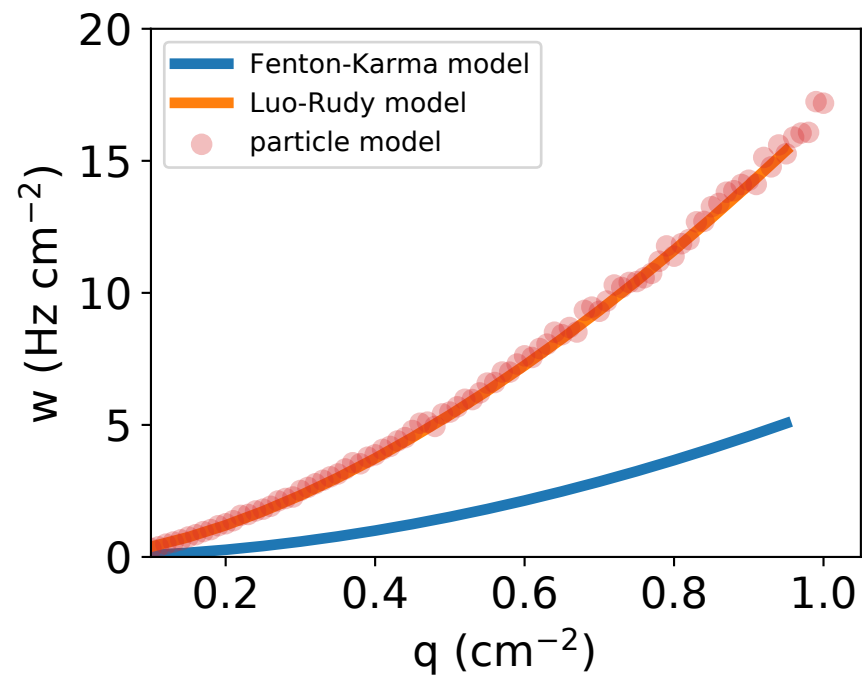
force_code=2, neighbors=0, reflect=0
 $r = 0.18148$ cm, $\kappa = 250.00000$ Hz
 $D = 0.49571$ cm²/s, $a = 10.30210$ cm²/s, $x_0 = 0$ cm



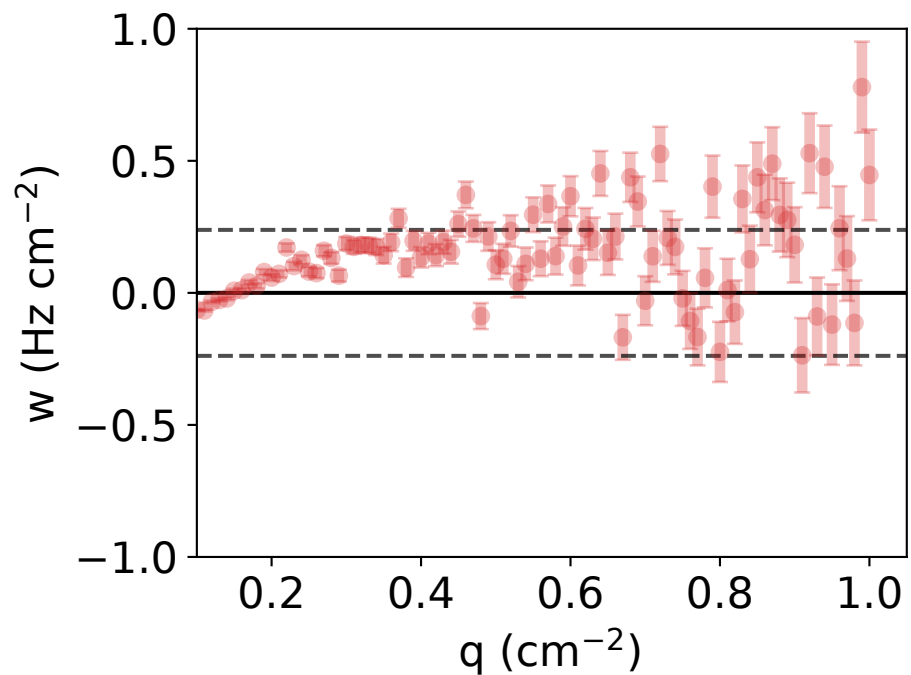
$\nu = 1.647 \pm 0.015$, $M = 16.771 \pm 0.631$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.236 Hz/cm²



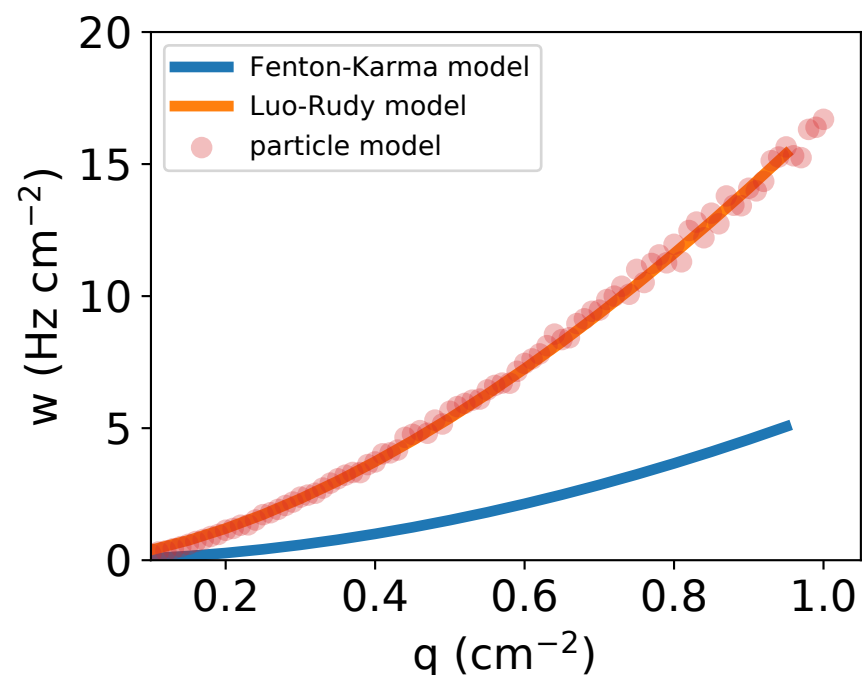
force_code=2, neighbors=0, reflect=0
 $r = 0.17819$ cm, $\kappa = 251.31400$ Hz
 $D = 0.69474$ cm²/s, $a = 10.32390$ cm²/s, $x_0 = 0$ cm



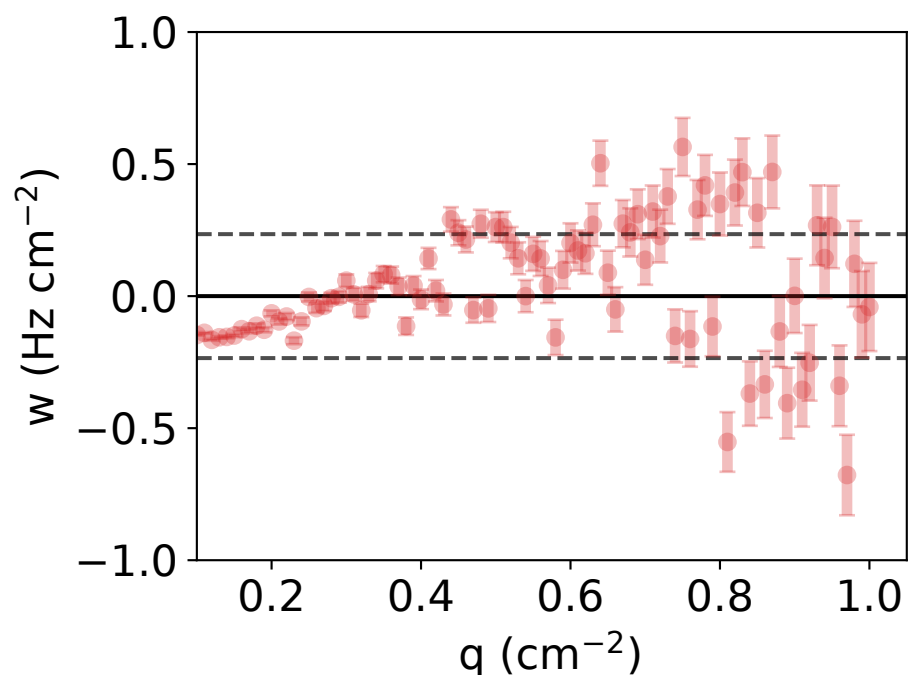
$\nu = 1.646 \pm 0.014$, $M = 16.781 \pm 0.610$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.239 Hz/cm²



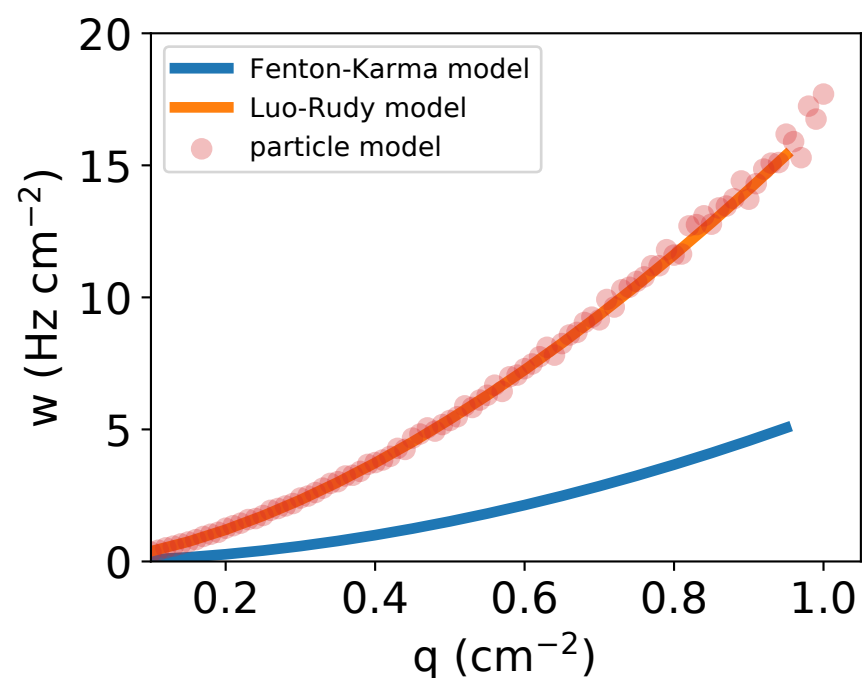
force_code=2, neighbors=0, reflect=0
 $r = 0.09979$ cm, $\kappa = 678.77800$ Hz
 $D = 0.48939$ cm²/s, $a = 6.74157$ cm²/s, $x_0 = 0$ cm



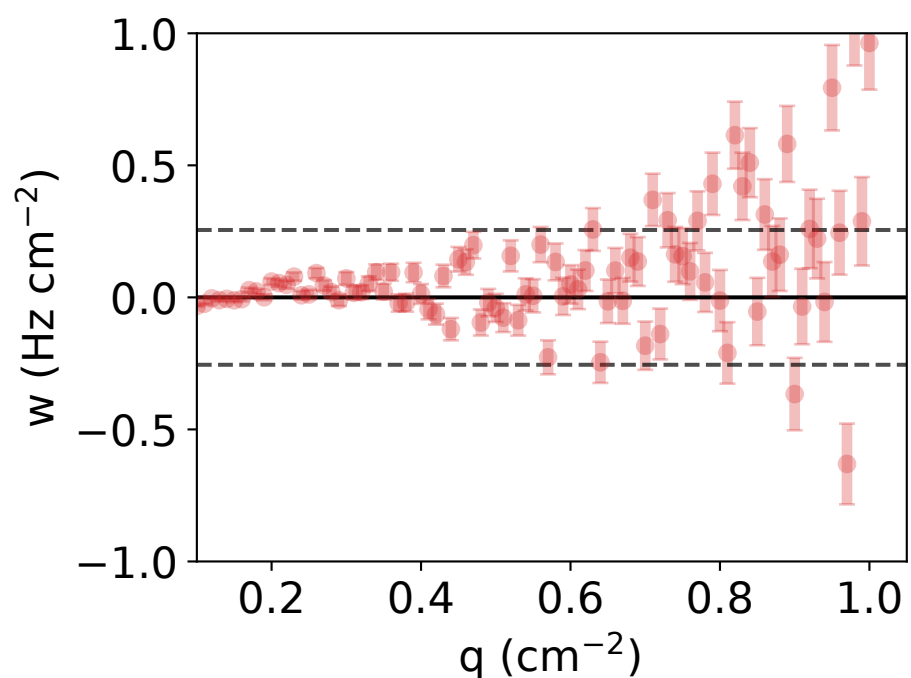
$\nu = 1.753 \pm 0.023$, $M = 16.562 \pm 0.987$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.235 Hz/cm²



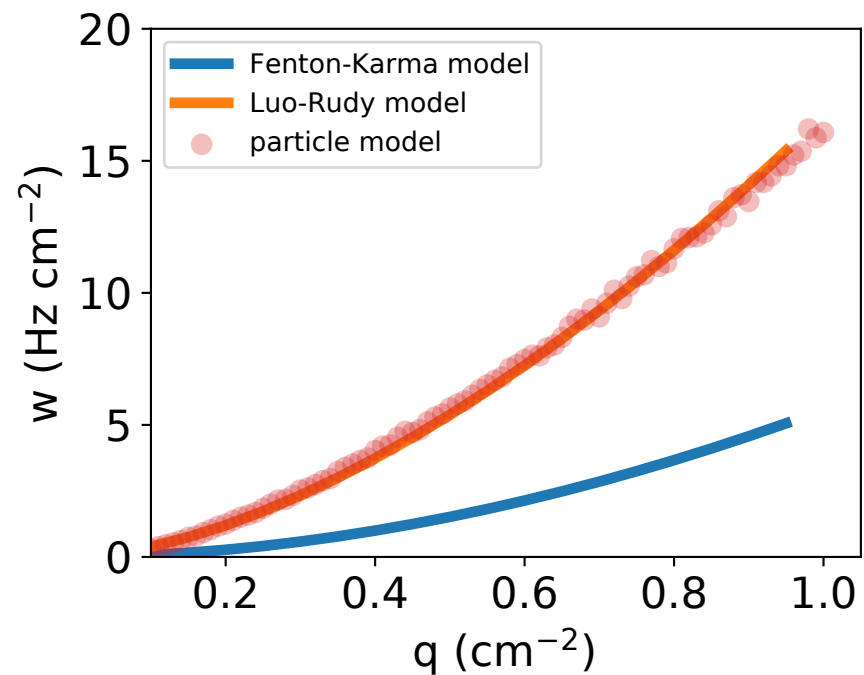
force_code=2, neighbors=0, reflect=0
 $r = 0.30122$ cm, $\kappa = 103.39400$ Hz
 $D = 0.20000$ cm²/s, $a = 14.24970$ cm²/s, $x_0 = 0$ cm



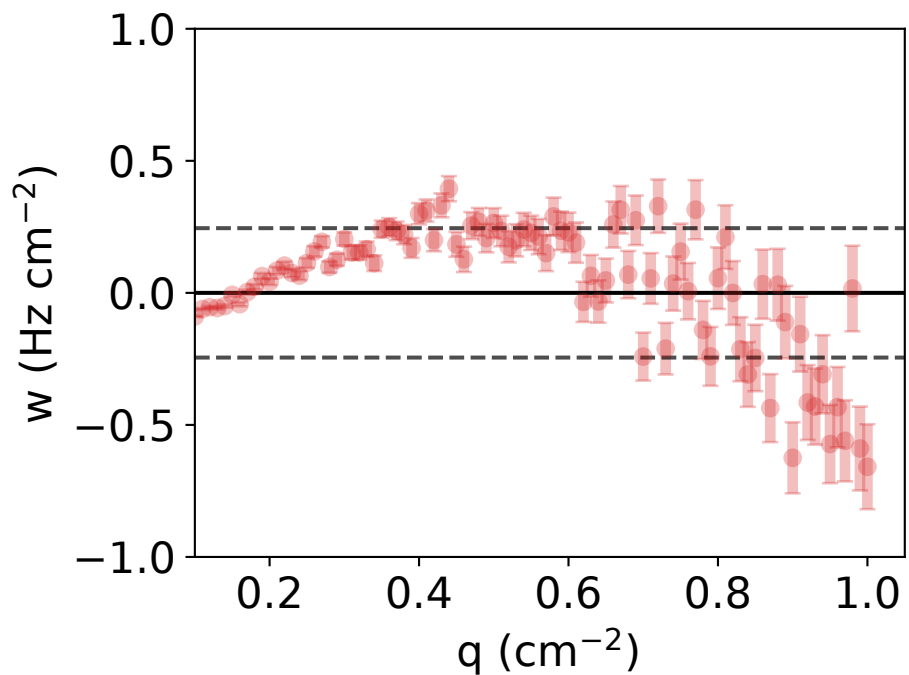
$\nu = 1.647 \pm 0.009$, $M = 17.011 \pm 0.451$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.255 Hz/cm²



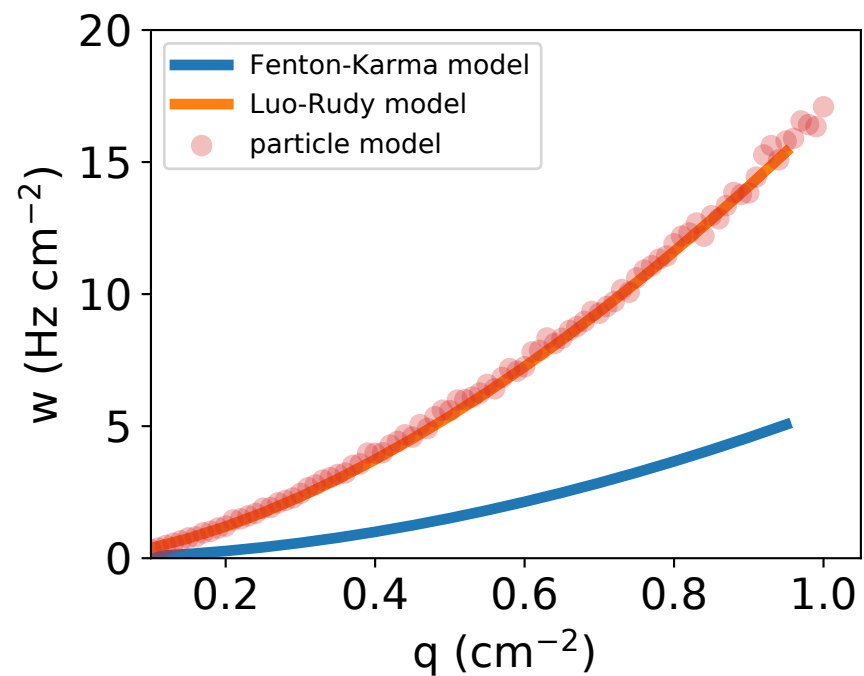
force_code=2, neighbors=0, reflect=0
 $r = 0.11411$ cm, $\kappa = 487.63700$ Hz
 $D = 0.10989$ cm²/s, $a = 9.08021$ cm²/s, $x_0 = 0$ cm



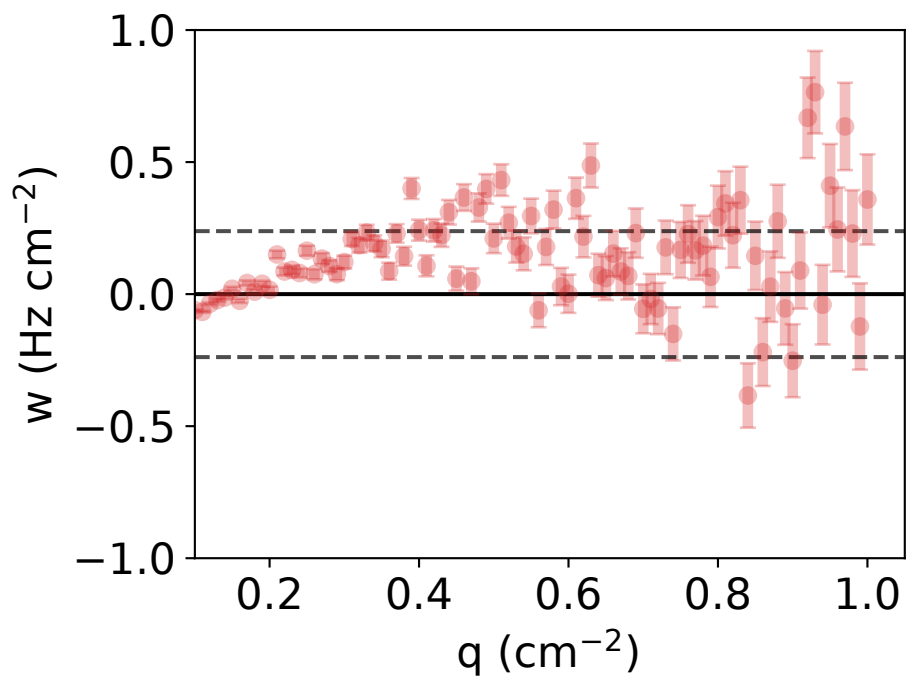
$\nu = 1.643 \pm 0.019$, $M = 16.134 \pm 0.749$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.245 Hz/cm²



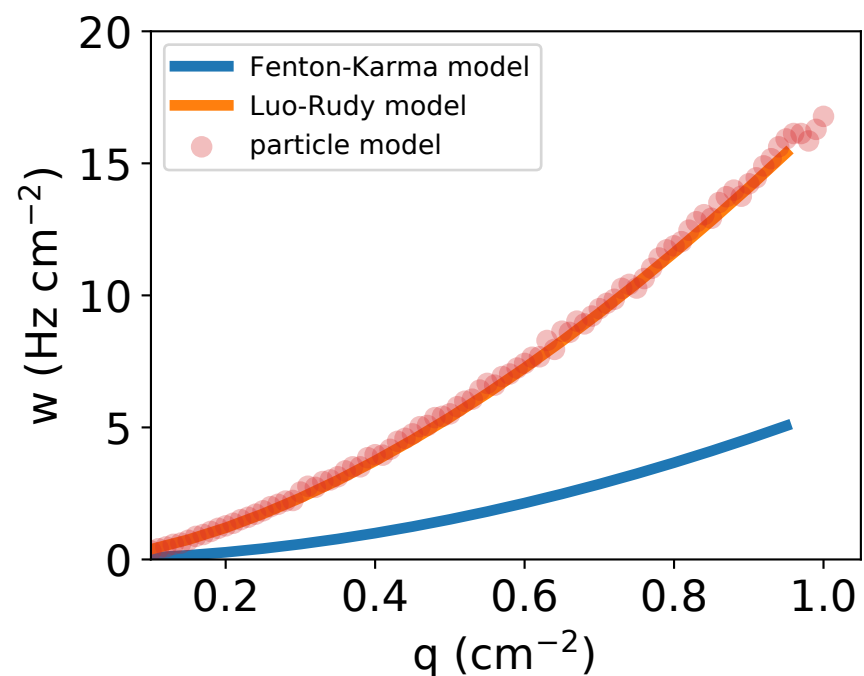
force_code=2, neighbors=0, reflect=0
 $r = 0.17866$ cm, $\kappa = 250.00000$ Hz
 $D = 0.70000$ cm²/s, $a = 10.33330$ cm²/s, $x_0 = 0$ cm



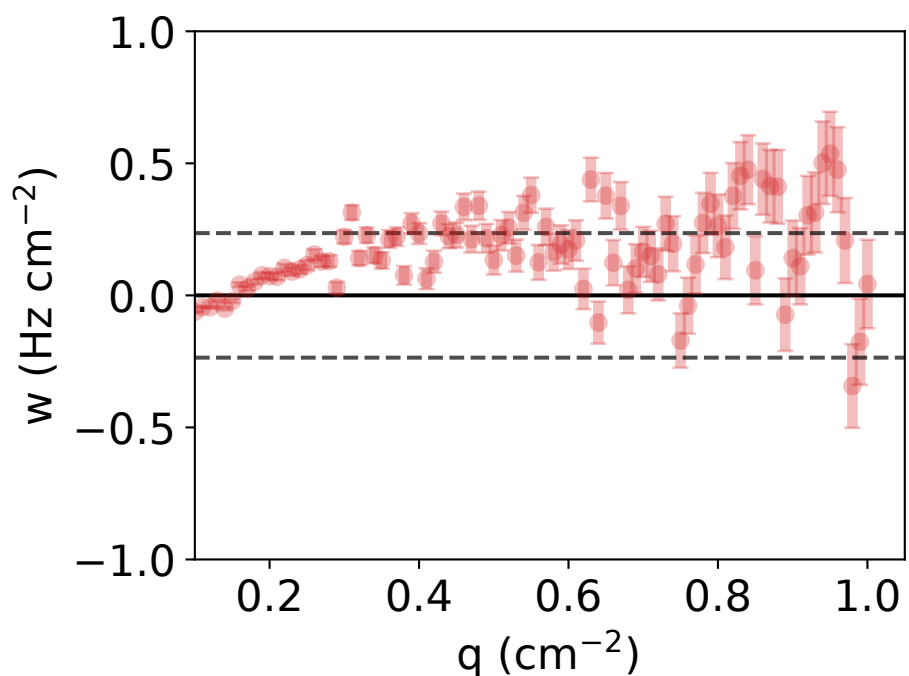
$\nu = 1.646 \pm 0.015$, $M = 16.730 \pm 0.634$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.238 Hz/cm²



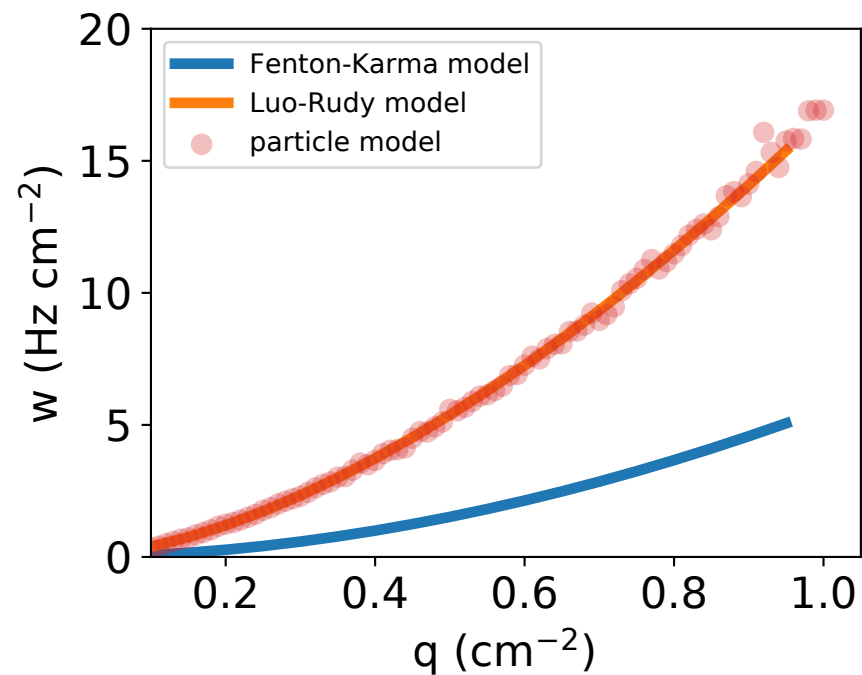
force_code=2, neighbors=0, reflect=0
 $r = 0.19077$ cm, $\kappa = 230.01700$ Hz
 $D = 0.60017$ cm²/s, $a = 10.55410$ cm²/s, $x_0 = 0$ cm



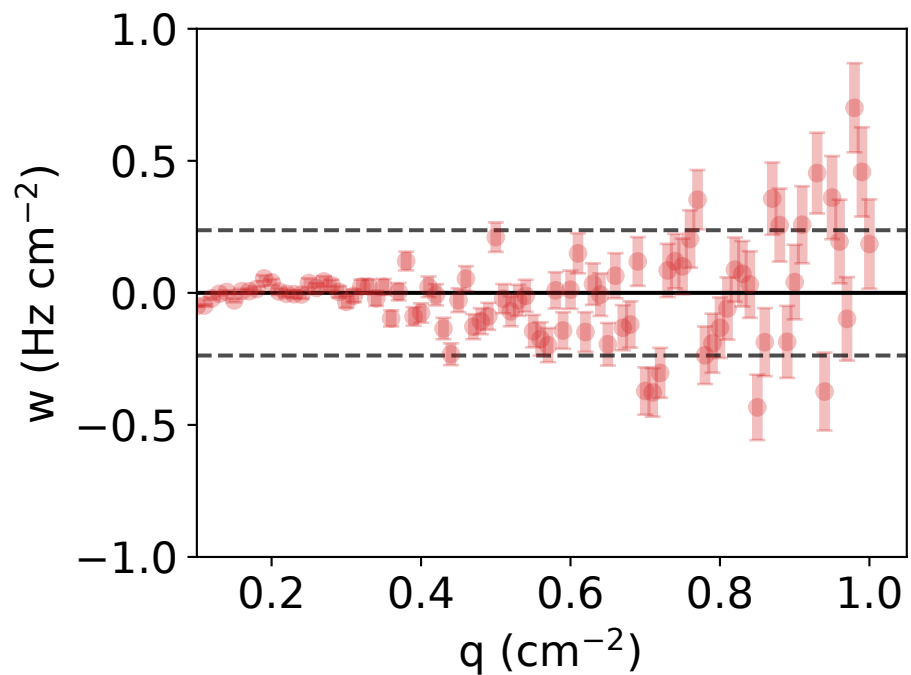
$\nu = 1.646 \pm 0.014$, $M = 16.787 \pm 0.589$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.236 Hz/cm²



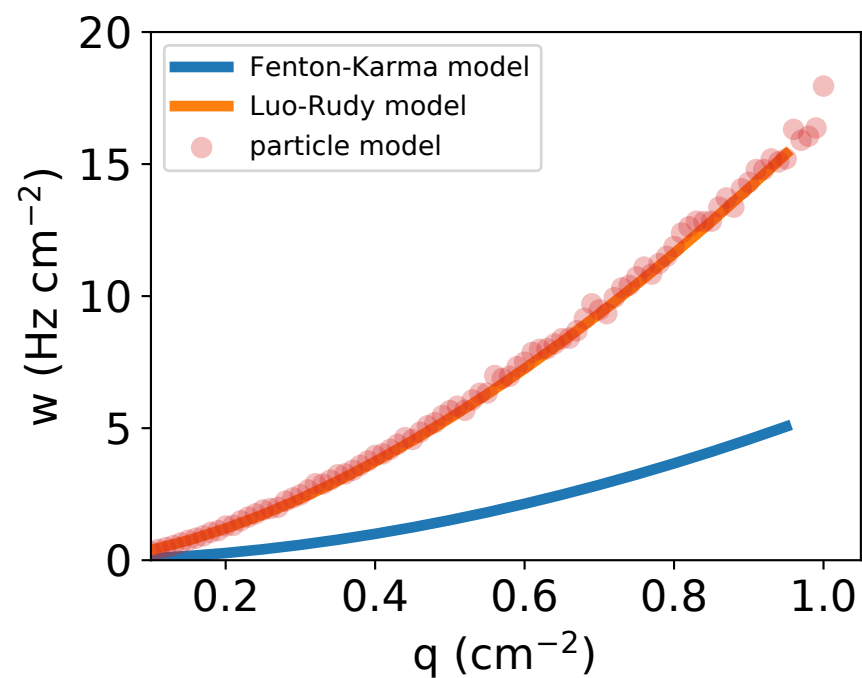
force_code=2, neighbors=0, reflect=0
 $r = 0.29821$ cm, $\kappa = 105.99200$ Hz
 $D = 0.31598$ cm²/s, $a = 13.39810$ cm²/s, $x_0 = 0$ cm



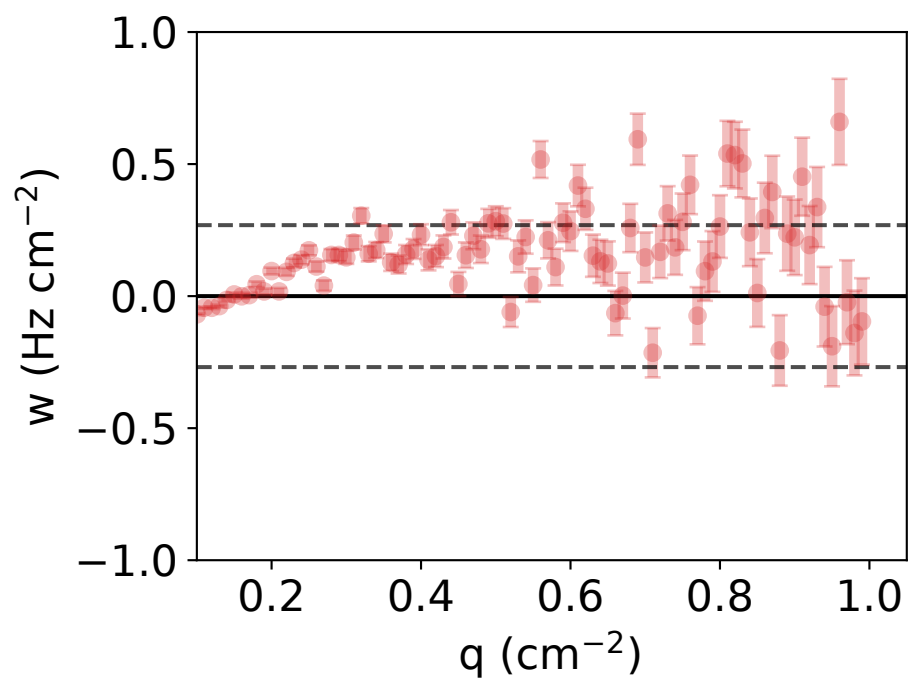
$\nu = 1.652 \pm 0.010$, $M = 16.892 \pm 0.495$ cm²($\nu - 1$)/s
 $RMSE_{particle \text{ vs full}} = 0.237$ Hz/cm²



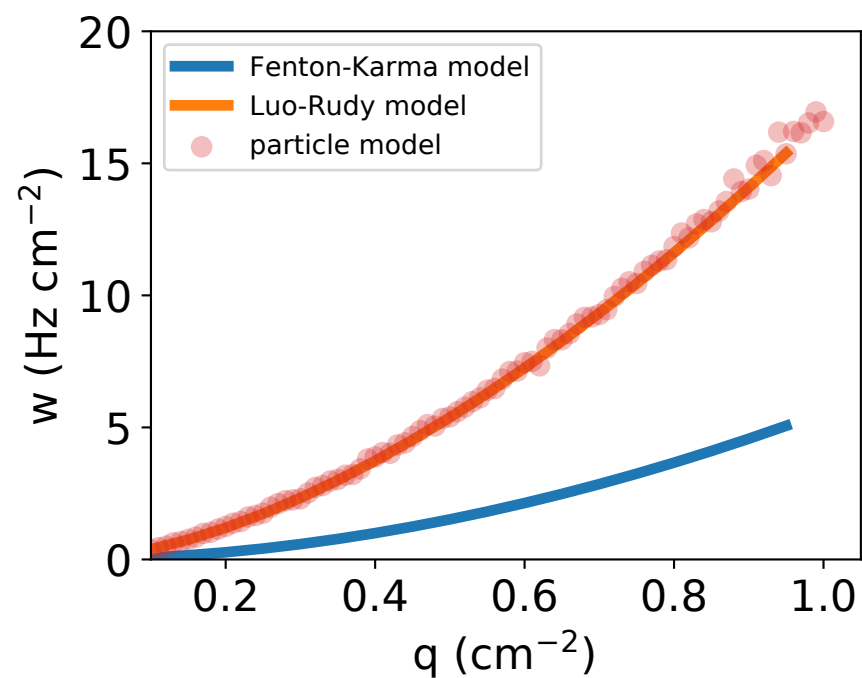
force_code=2, neighbors=0, reflect=0
 $r = 0.19145$ cm, $\kappa = 226.60800$ Hz
 $D = 0.69357$ cm²/s, $a = 10.48860$ cm²/s, $x_0 = 0$ cm



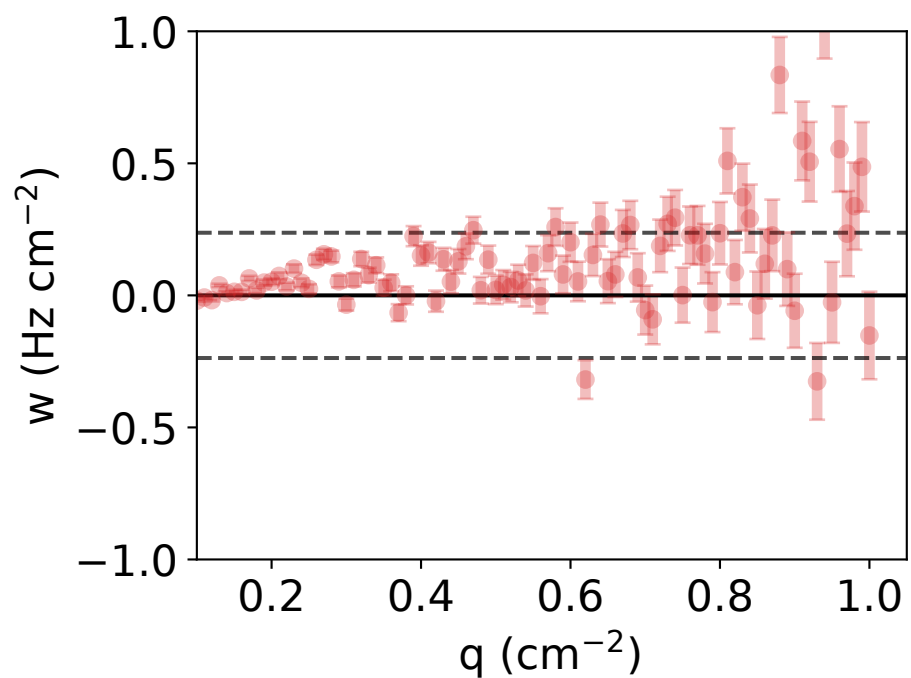
$\nu = 1.650 \pm 0.014$, $M = 16.827 \pm 0.624$ cm²($\nu - 1$)/s
 $RMSE_{particle \text{ vs full}} = 0.269$ Hz/cm²



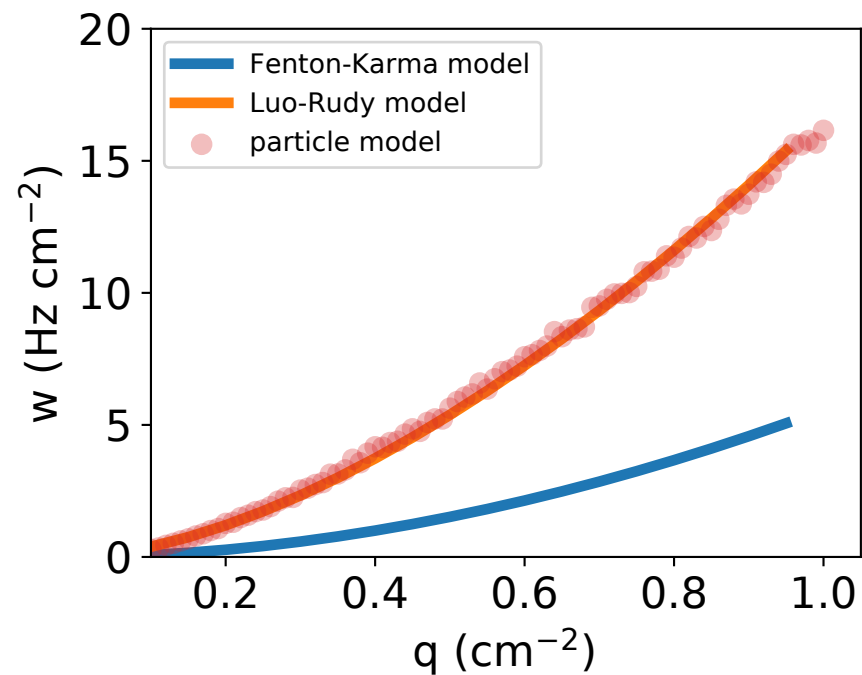
force_code=2, neighbors=0, reflect=0
 $r = 0.29444$ cm, $\kappa = 108.02700$ Hz
 $D = 0.77592$ cm²/s, $a = 13.72890$ cm²/s, $x_0 = 0$ cm



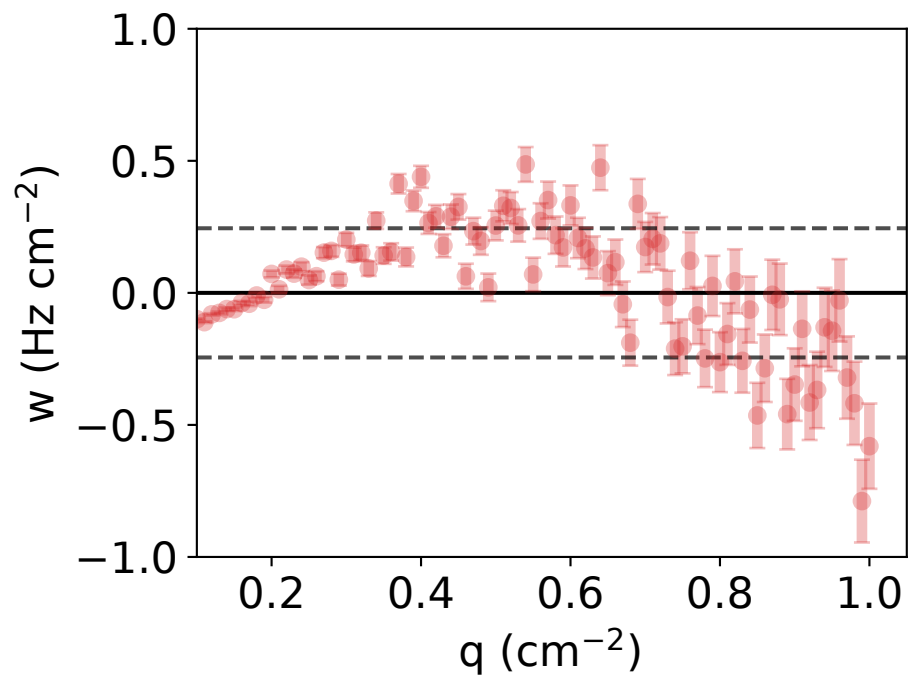
$\nu = 1.634 \pm 0.009$, $M = 16.986 \pm 0.427$ cm²($\nu - 1$)/s
 $RMSE_{particle \text{ vs full}} = 0.237$ Hz/cm²



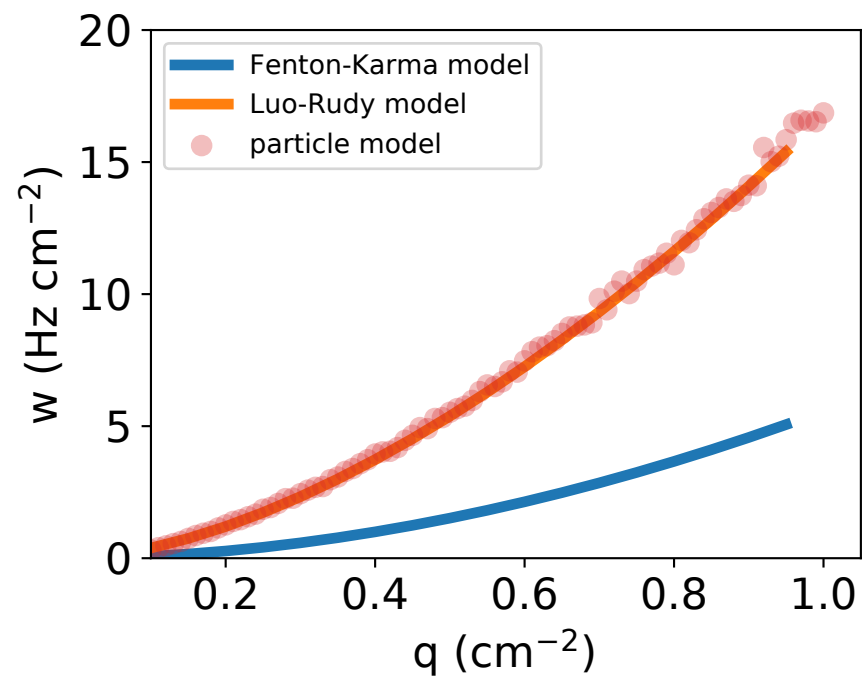
force_code=2, neighbors=0, reflect=0
 $r = 0.09113$ cm, $\kappa = 658.89200$ Hz
 $D = 0.10914$ cm²/s, $a = 8.56506$ cm²/s, $x_0 = 0$ cm



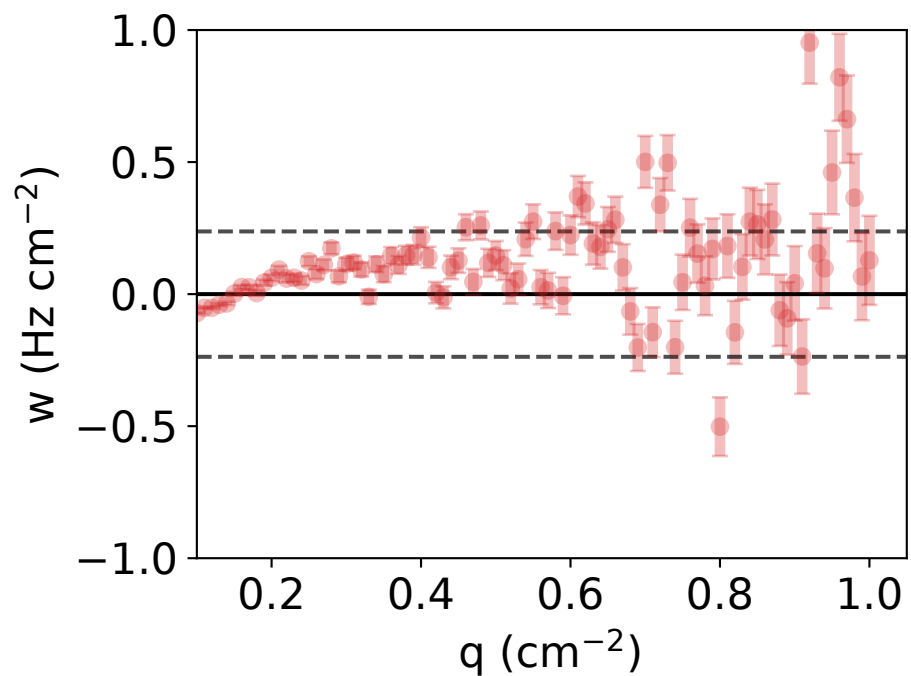
$\nu = 1.666 \pm 0.022$, $M = 16.116 \pm 0.885$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.245 Hz/cm²



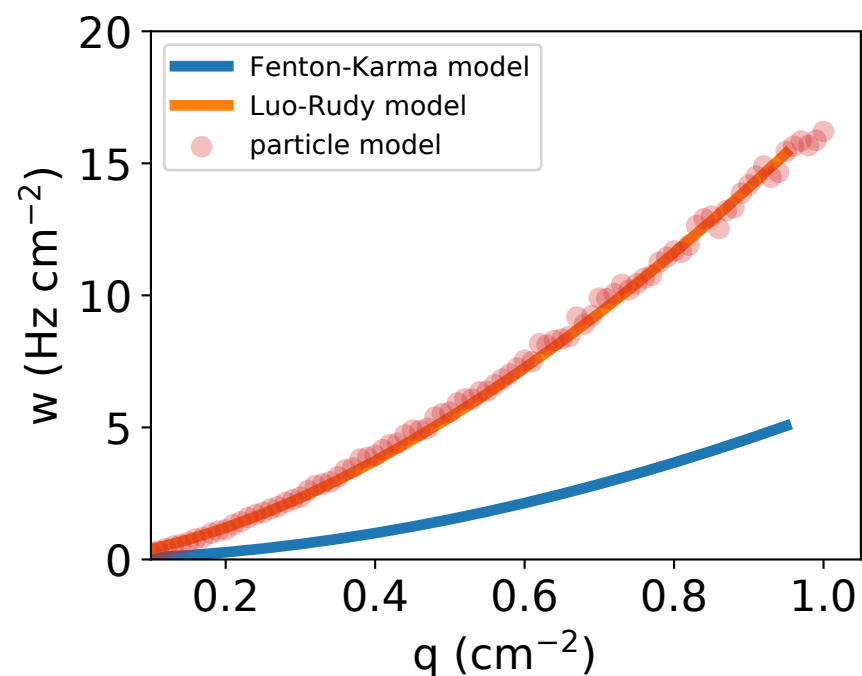
force_code=2, neighbors=0, reflect=0
 $r = 0.20724$ cm, $\kappa = 200.00000$ Hz
 $D = 0.44978$ cm²/s, $a = 10.74740$ cm²/s, $x_0 = 0$ cm



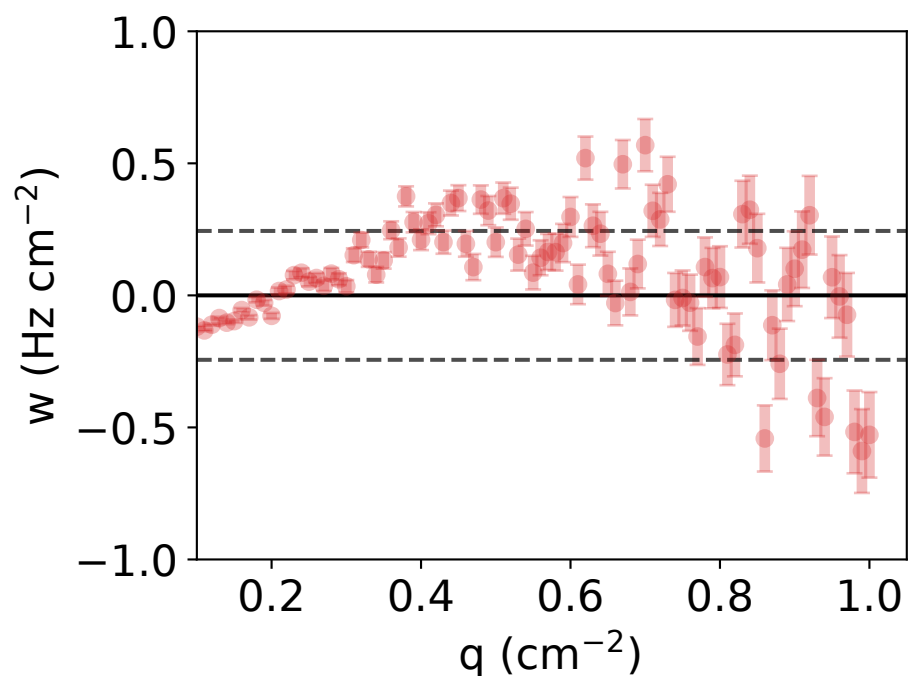
$\nu = 1.655 \pm 0.013$, $M = 16.835 \pm 0.588$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.237 Hz/cm²



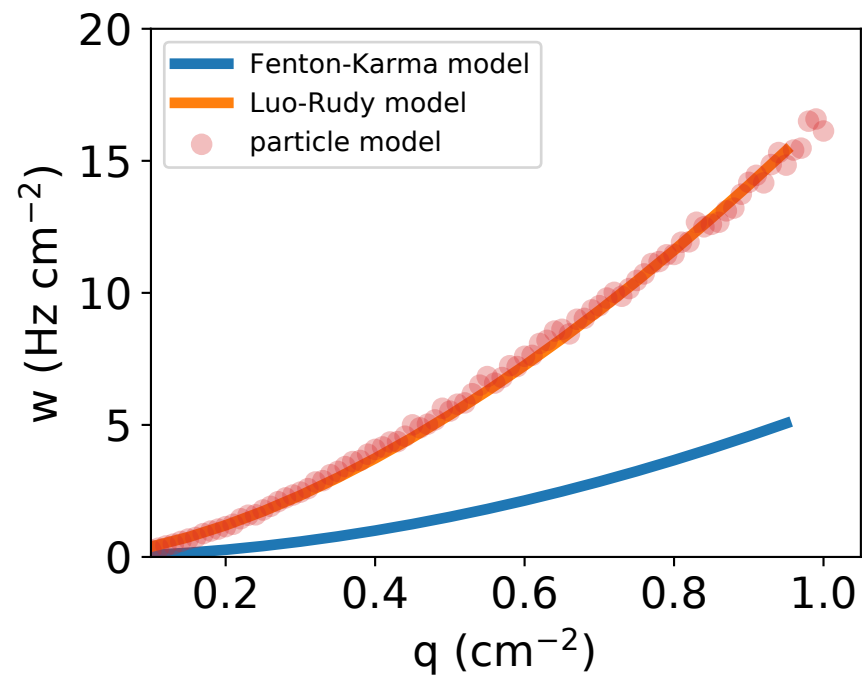
force_code=2, neighbors=0, reflect=0
 $r = 0.09883$ cm, $\kappa = 616.99600$ Hz
 $D = 0.63083$ cm²/s, $a = 7.74096$ cm²/s, $x_0 = 0$ cm



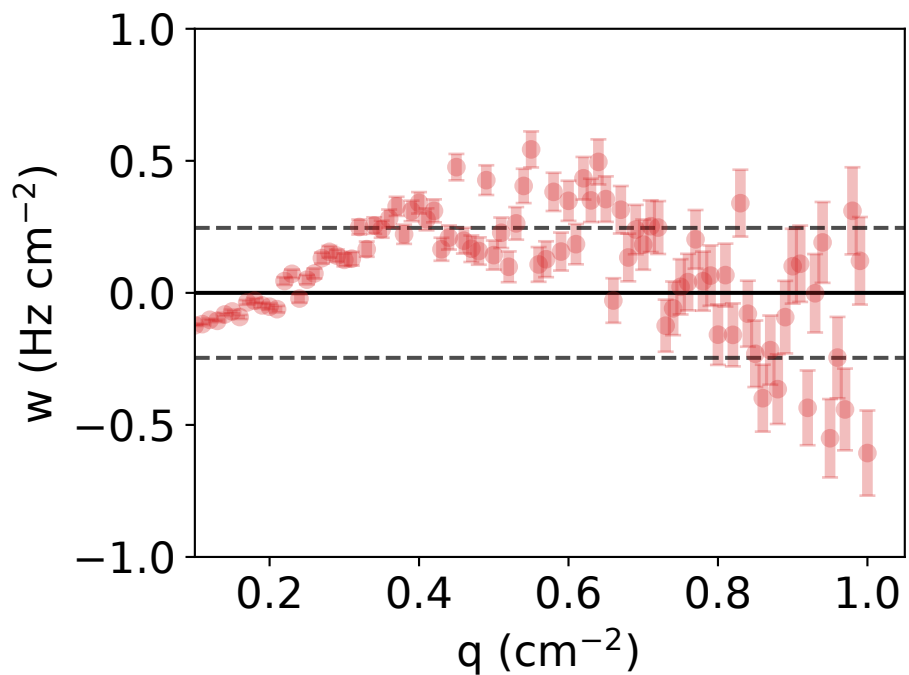
$\nu = 1.697 \pm 0.024$, $M = 16.325 \pm 0.968$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.244 Hz/cm²



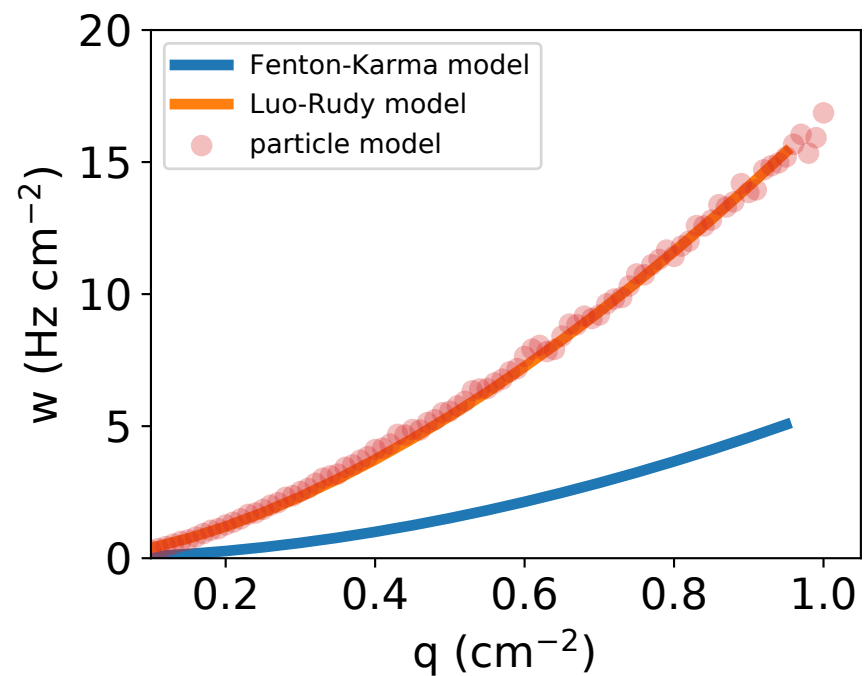
force_code=2, neighbors=0, reflect=0
 $r = 0.09909$ cm, $\kappa = 616.32900$ Hz
 $D = 0.71633$ cm²/s, $a = 7.74347$ cm²/s, $x_0 = 0$ cm



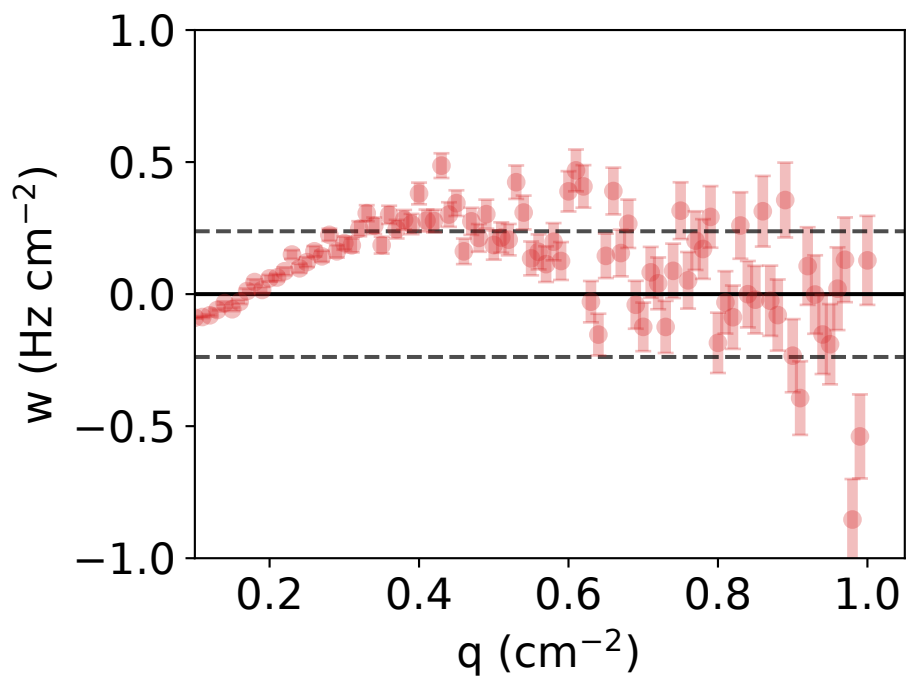
$\nu = 1.692 \pm 0.024$, $M = 16.289 \pm 0.984$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.246 Hz/cm²



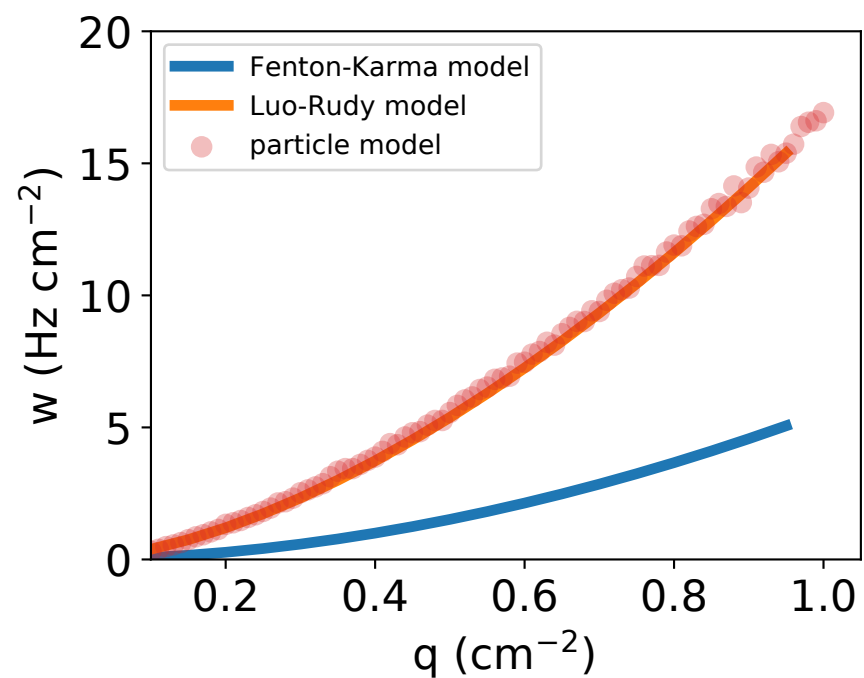
force_code=2, neighbors=0, reflect=0
 $r = 0.12880$ cm, $\kappa = 404.27300$ Hz
 $D = 0.77436$ cm²/s, $a = 9.06790$ cm²/s, $x_0 = 0$ cm



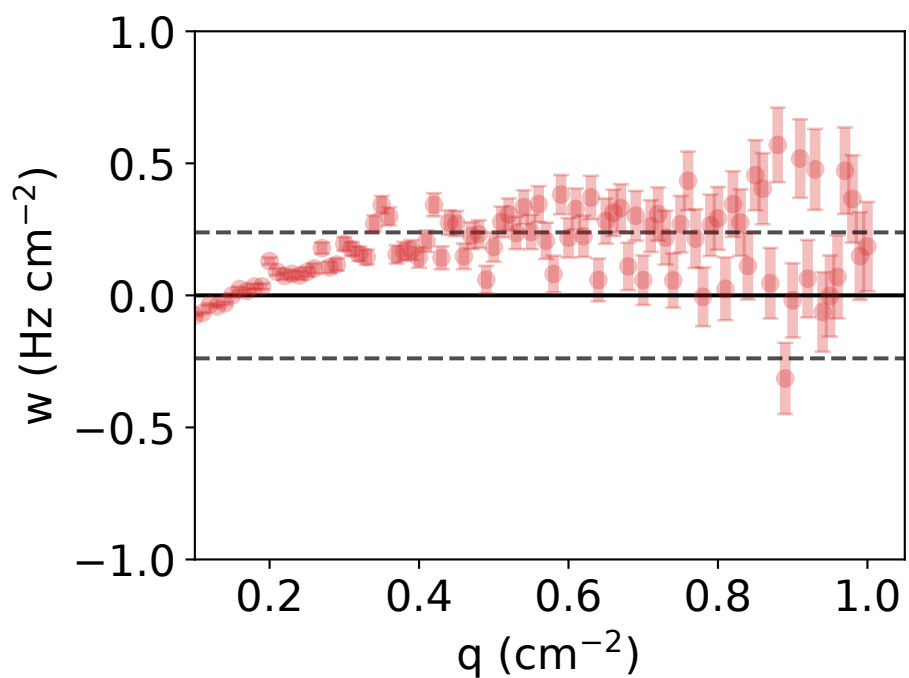
$\nu = 1.654 \pm 0.021$, $M = 16.335 \pm 0.836$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.238 Hz/cm²



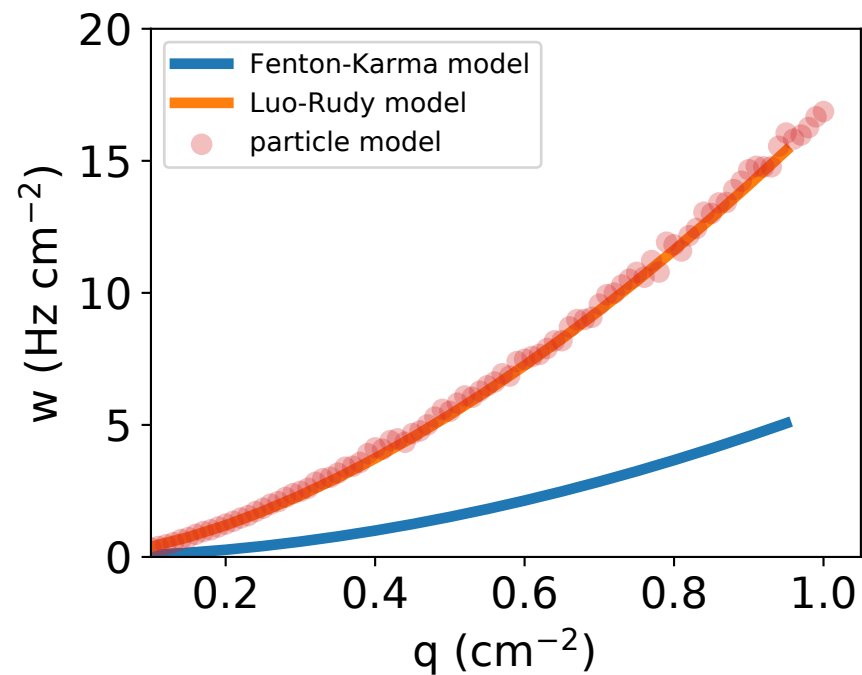
force_code=2, neighbors=0, reflect=0
 $r = 0.17162$ cm, $\kappa = 272.08800$ Hz
 $D = 0.54418$ cm²/s, $a = 10.17320$ cm²/s, $x_0 = 0$ cm



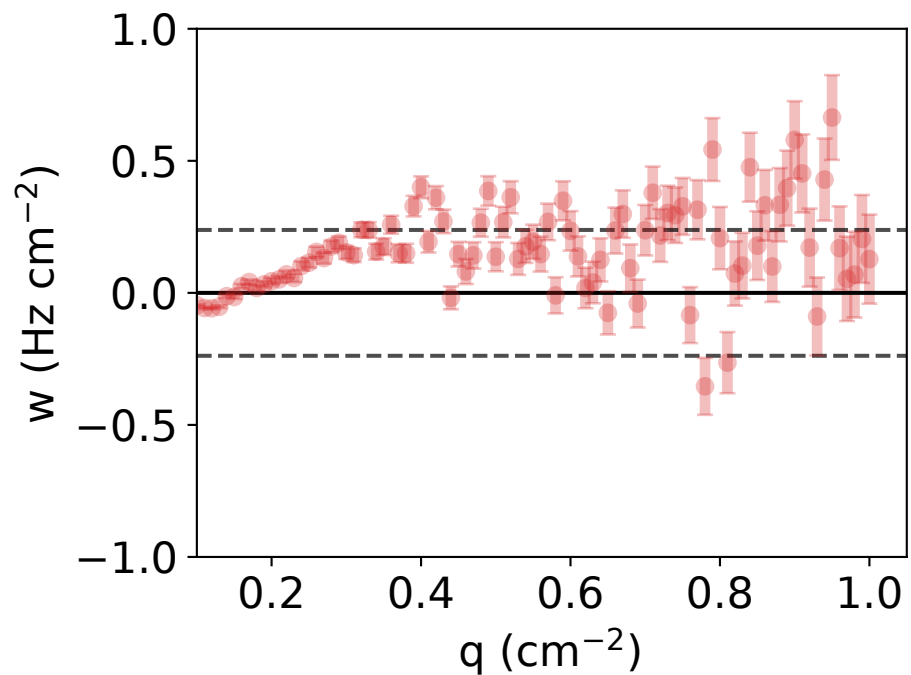
$\nu = 1.652 \pm 0.015$, $M = 16.775 \pm 0.619$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.239 Hz/cm²



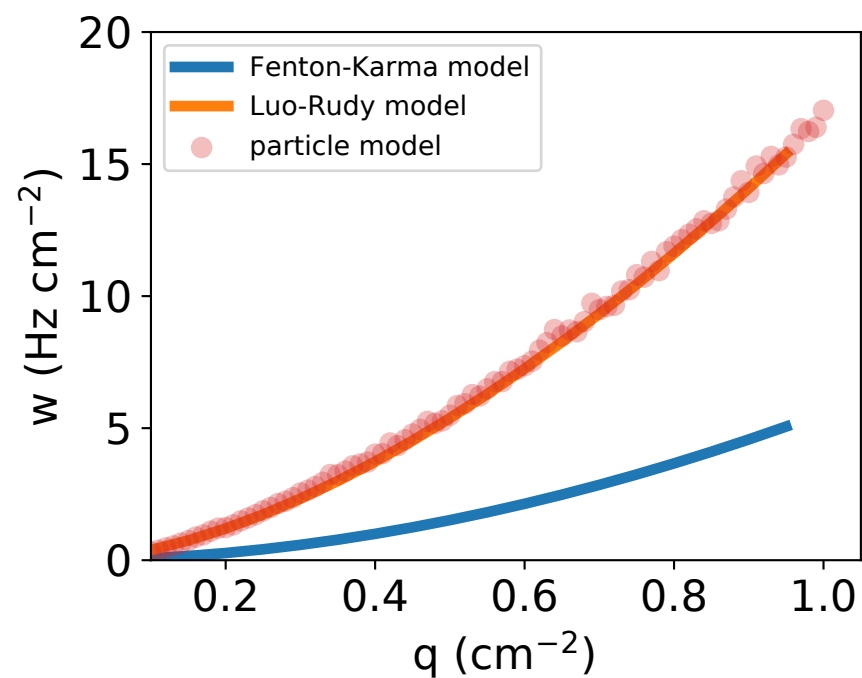
force_code=2, neighbors=0, reflect=0
 $r = 0.17958$ cm, $\kappa = 248.35000$ Hz
 $D = 0.68680$ cm²/s, $a = 10.36350$ cm²/s, $x_0 = 0$ cm



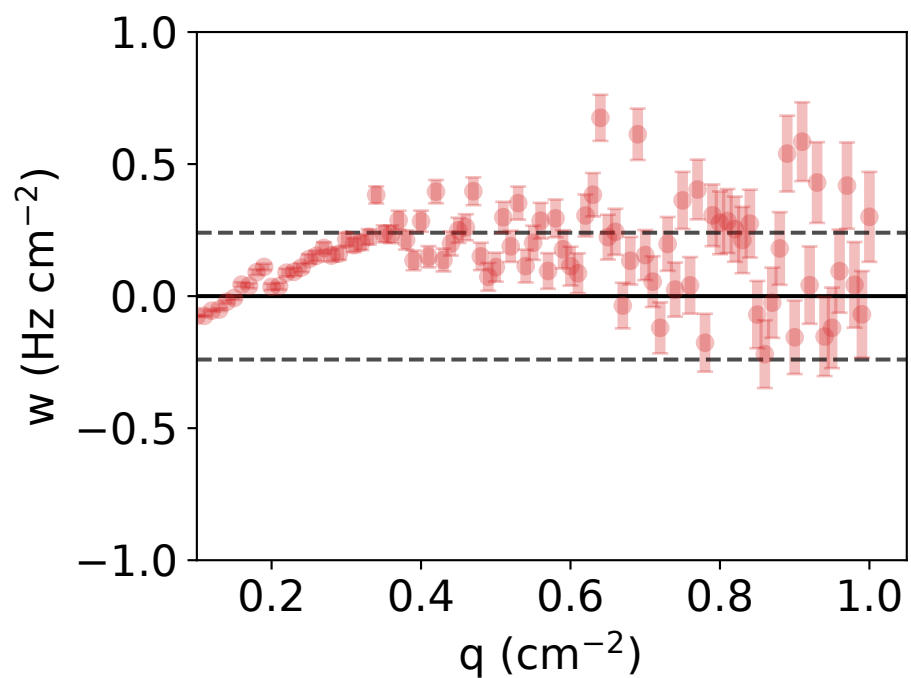
$\nu = 1.649 \pm 0.014$, $M = 16.789 \pm 0.605$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.238 Hz/cm²



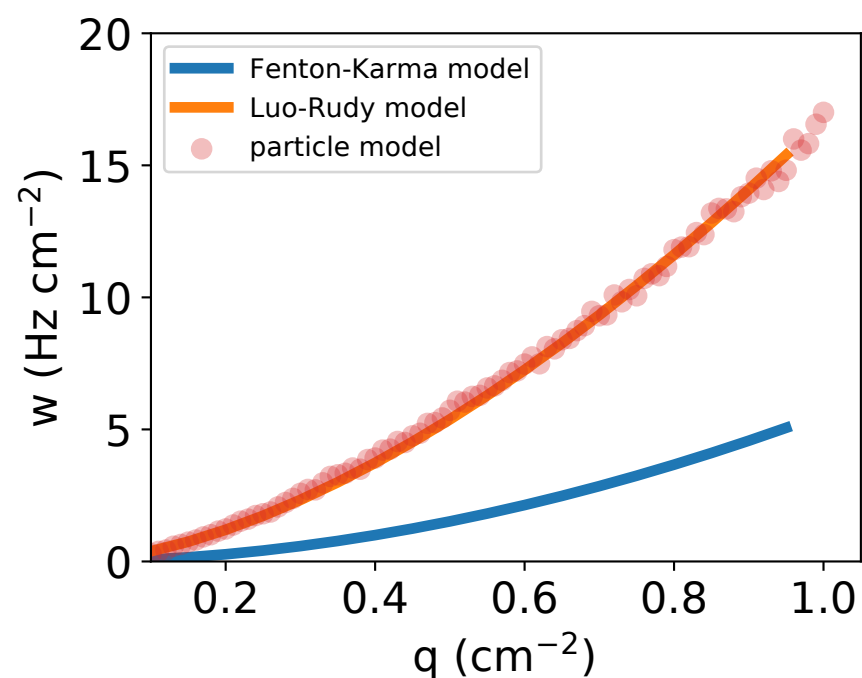
force_code=2, neighbors=0, reflect=0
 $r = 0.15906$ cm, $\kappa = 300.00000$ Hz
 $D = 0.80000$ cm²/s, $a = 9.81475$ cm²/s, $x_0 = 0$ cm



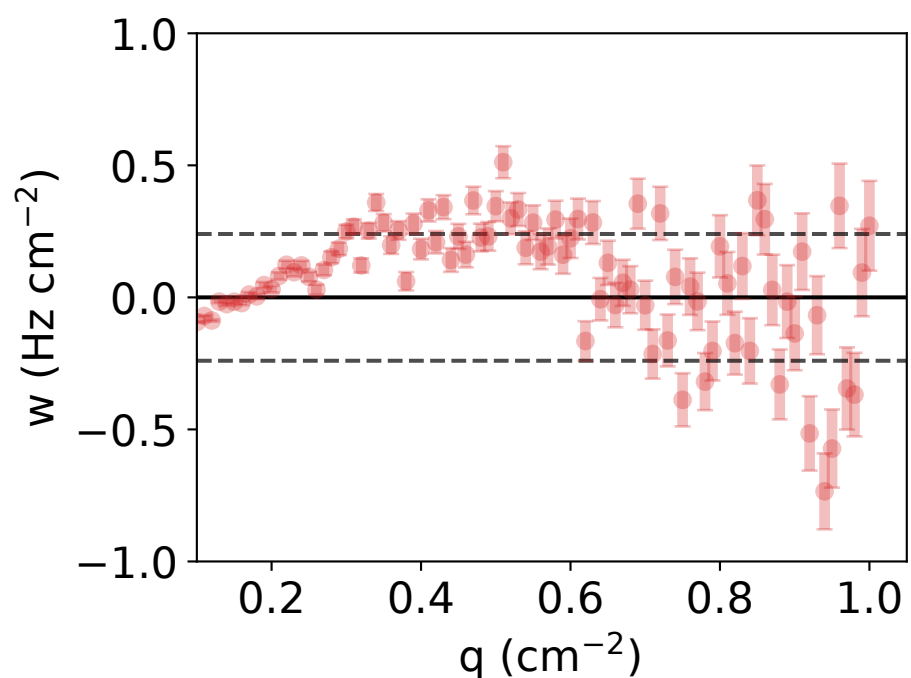
$\nu = 1.647 \pm 0.017$, $M = 16.653 \pm 0.712$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.240 Hz/cm²



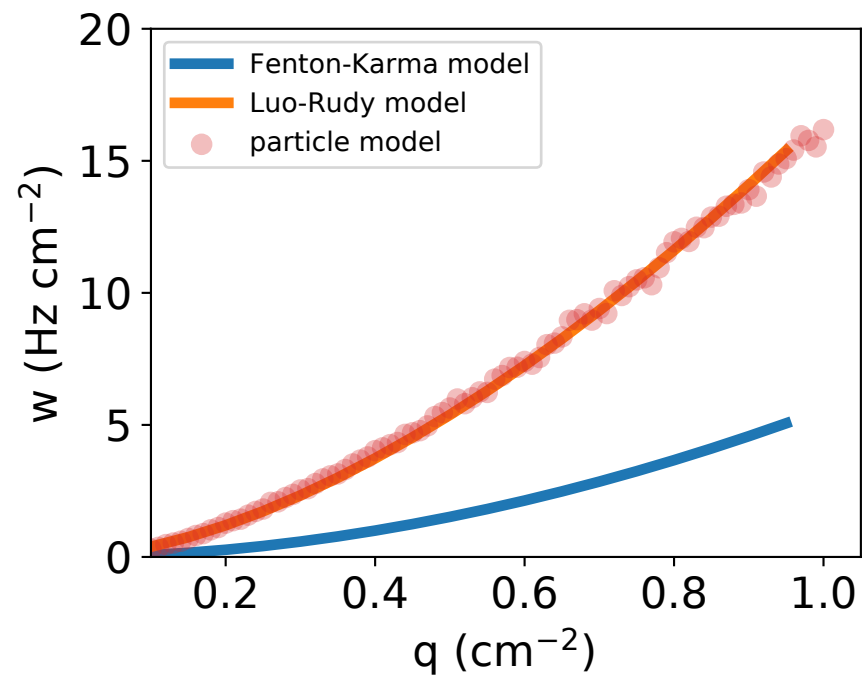
force_code=2, neighbors=0, reflect=0
 $r = 0.12848$ cm, $\kappa = 405.26200$ Hz
 $D = 0.32105$ cm²/s, $a = 9.16968$ cm²/s, $x_0 = 0$ cm



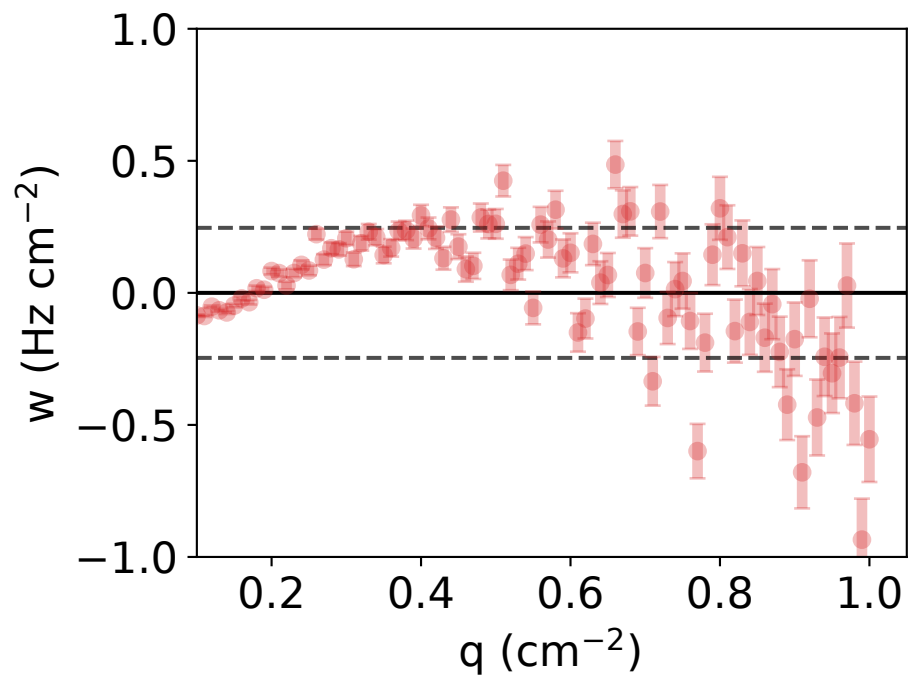
$\nu = 1.648 \pm 0.020$, $M = 16.305 \pm 0.807$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.240 Hz/cm²



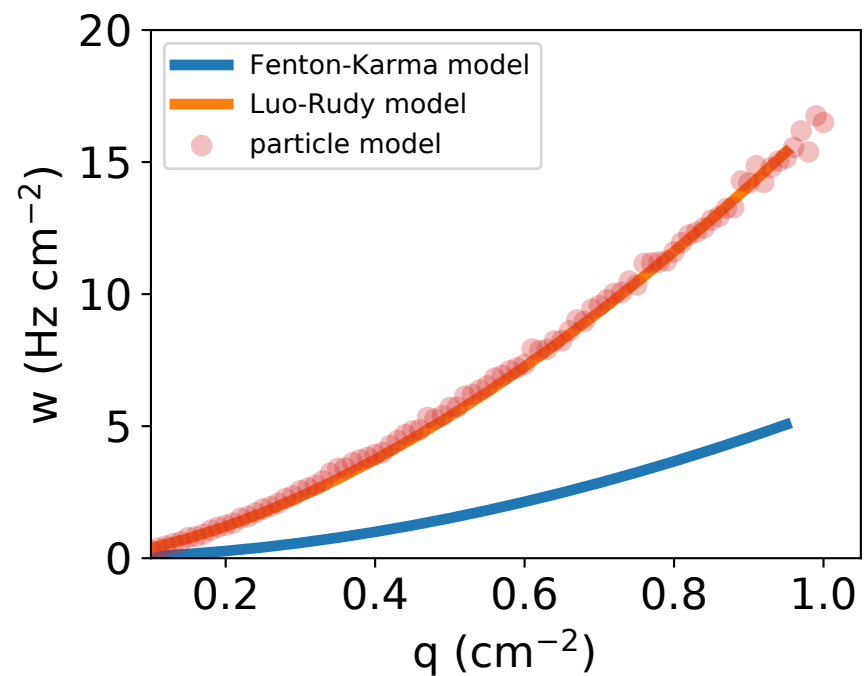
force_code=2, neighbors=0, reflect=0
 $r = 0.13117$ cm, $\kappa = 391.49900$ Hz
 $D = 0.77875$ cm²/s, $a = 9.07017$ cm²/s, $x_0 = 0$ cm



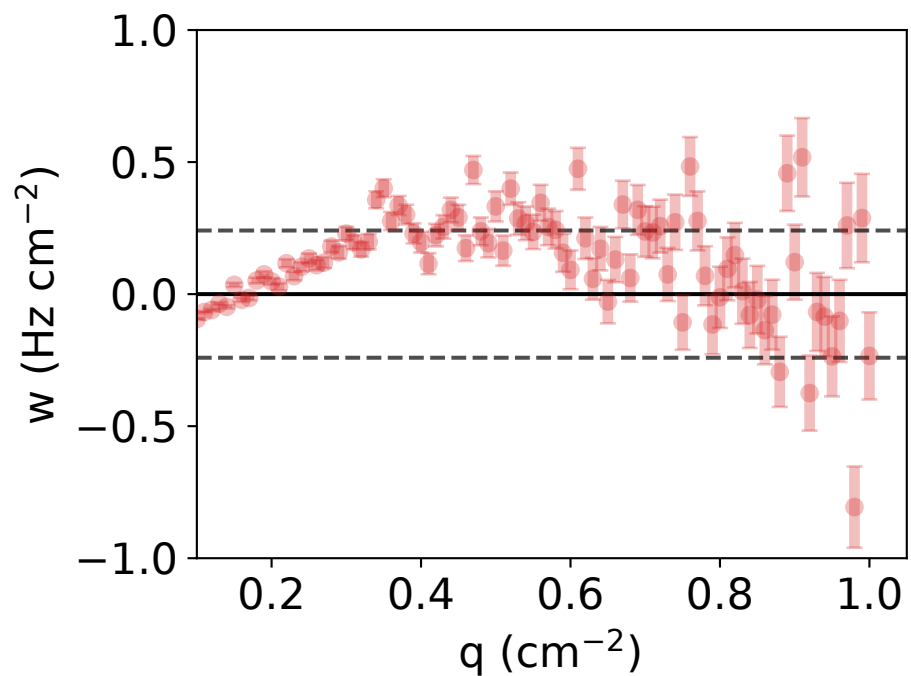
$\nu = 1.652 \pm 0.020$, $M = 16.165 \pm 0.799$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.246 Hz/cm²



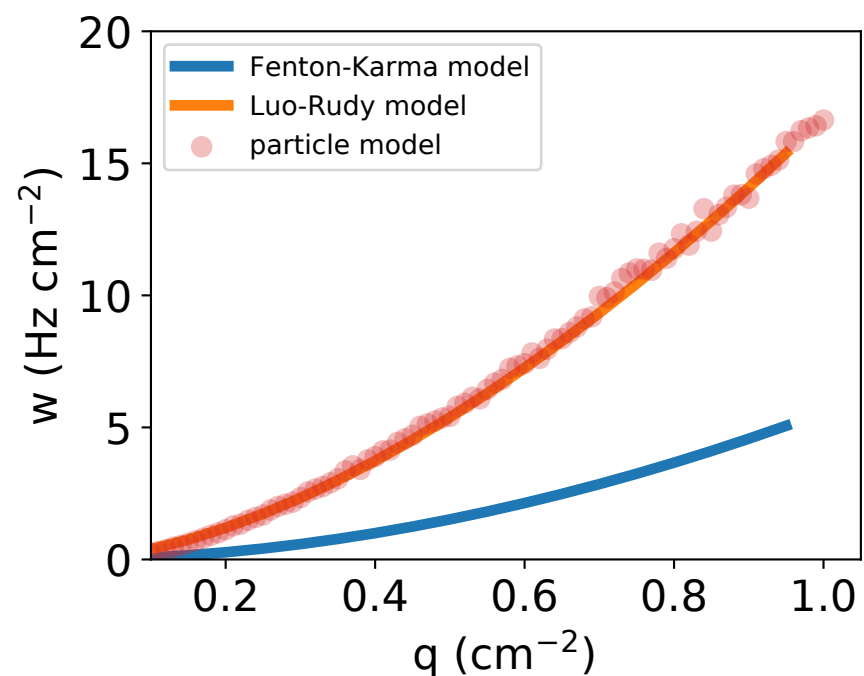
force_code=2, neighbors=0, reflect=0
 $r = 0.12946$ cm, $\kappa = 404.37500$ Hz
 $D = 0.50438$ cm²/s, $a = 9.15983$ cm²/s, $x_0 = 0$ cm



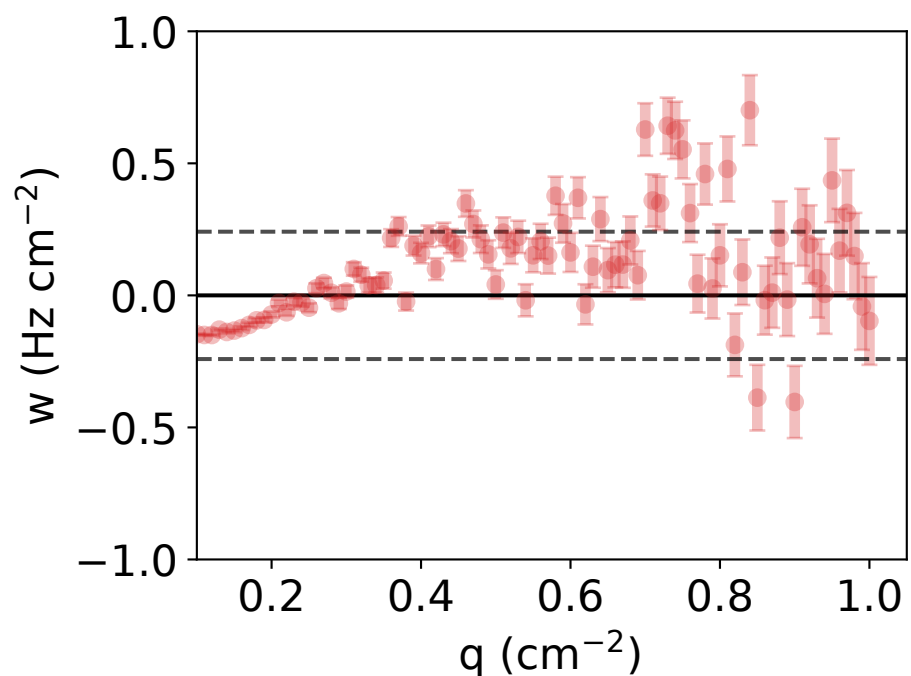
$\nu = 1.649 \pm 0.019$, $M = 16.427 \pm 0.779$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.241 Hz/cm²



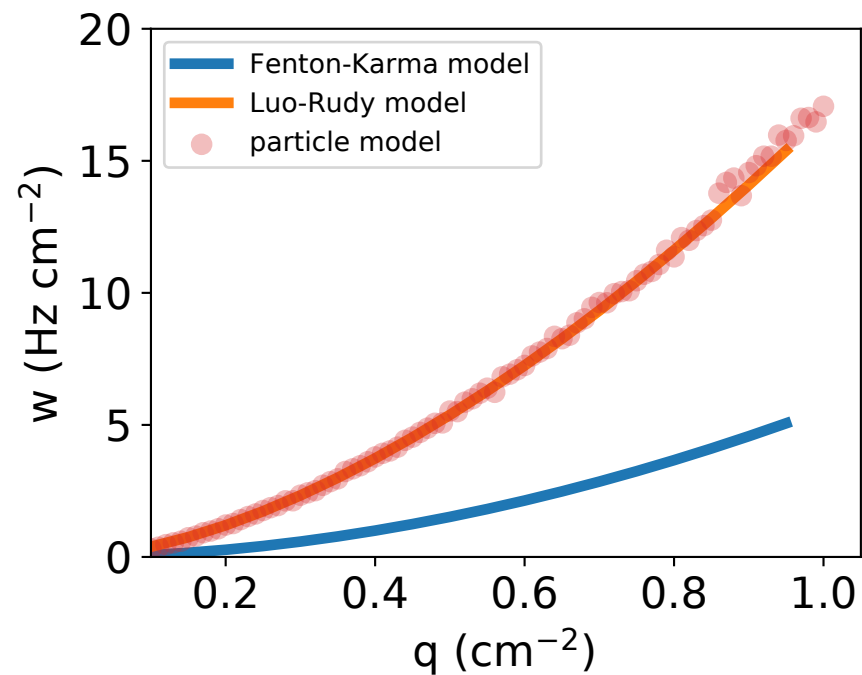
force_code=2, neighbors=0, reflect=0
 $r = 0.09457$ cm, $\kappa = 713.03900$ Hz
 $D = 0.65978$ cm²/s, $a = 6.97209$ cm²/s, $x_0 = 0$ cm



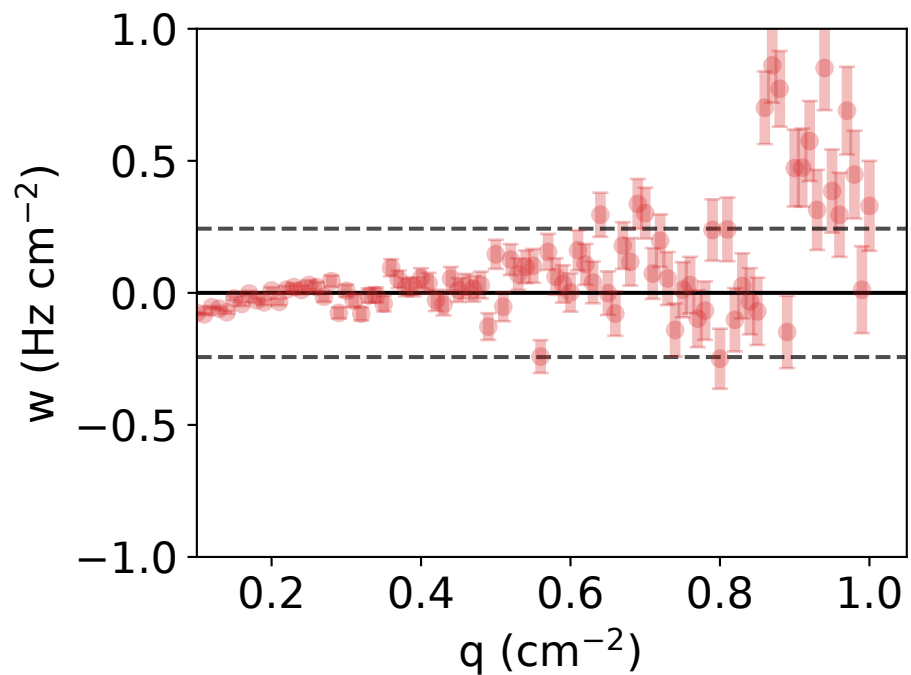
$\nu = 1.744 \pm 0.024$, $M = 16.689 \pm 0.996$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.241 Hz/cm²



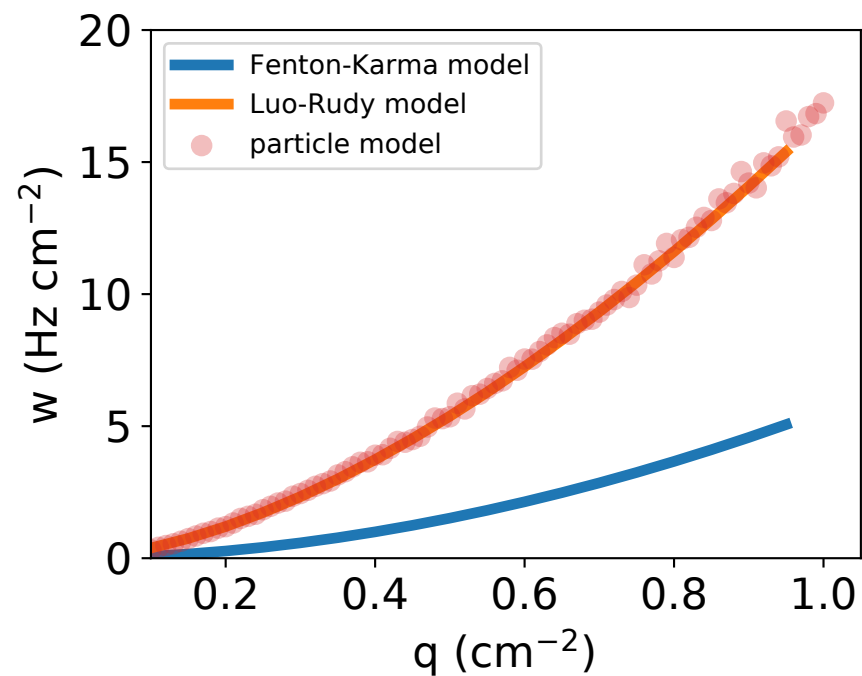
force_code=2, neighbors=0, reflect=0
 $r = 0.24443$ cm, $\kappa = 156.76400$ Hz
 $D = 0.20000$ cm²/s, $a = 10.73040$ cm²/s, $x_0 = 0$ cm



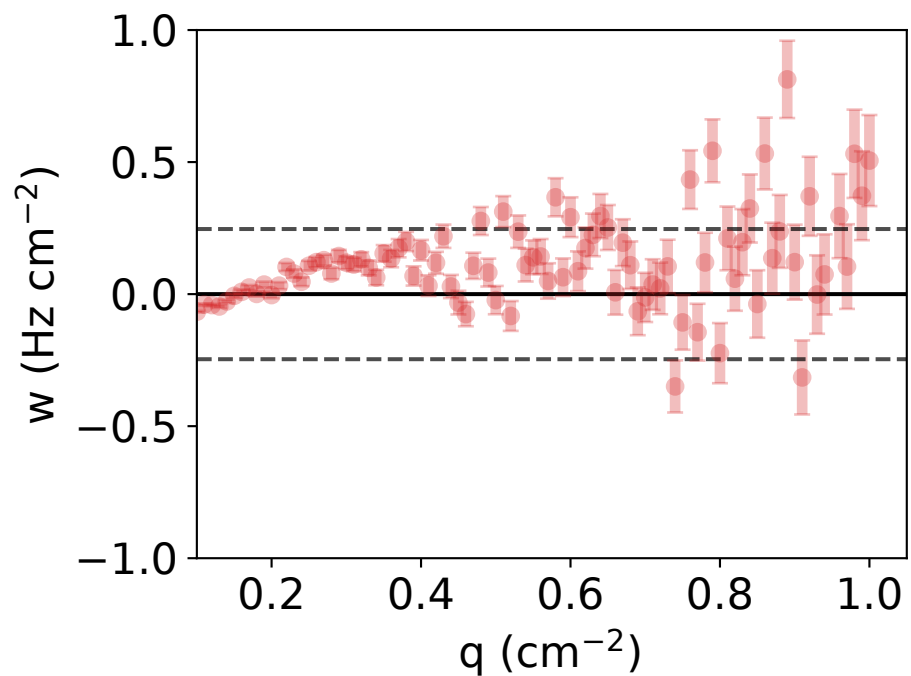
$\nu = 1.686 \pm 0.011$, $M = 17.059 \pm 0.496$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.243 Hz/cm²



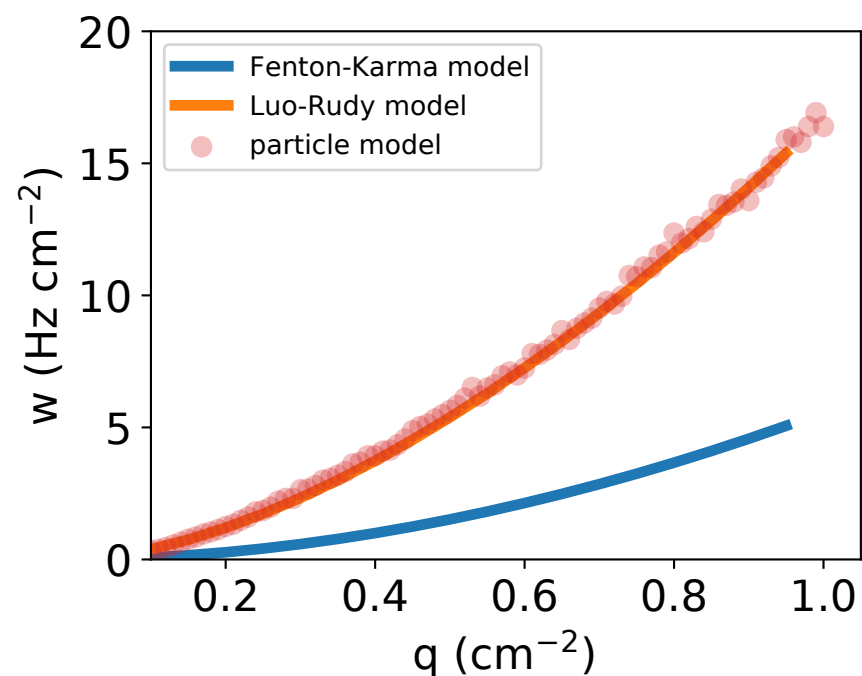
force_code=2, neighbors=0, reflect=0
 $r = 0.20717$ cm, $\kappa = 200.00000$ Hz
 $D = 0.40000$ cm²/s, $a = 10.87390$ cm²/s, $x_0 = 0$ cm



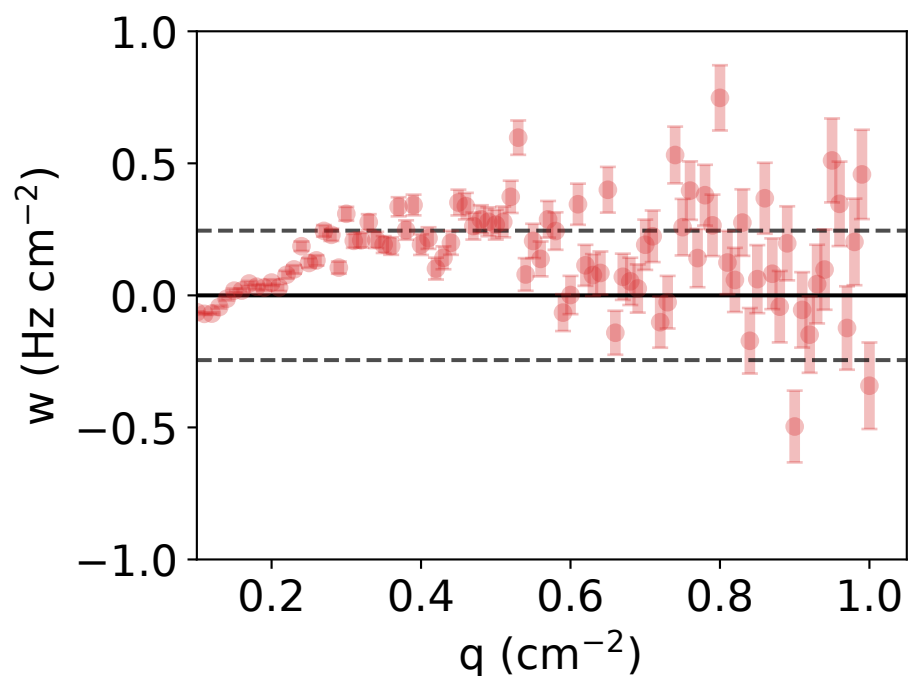
$\nu = 1.655 \pm 0.013$, $M = 16.892 \pm 0.564$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.246 Hz/cm²



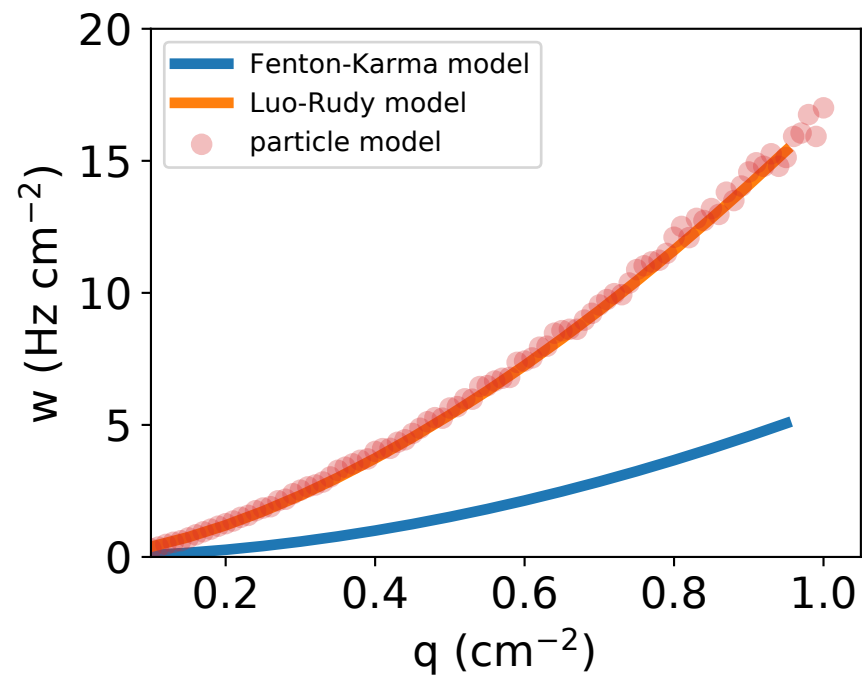
force_code=2, neighbors=0, reflect=0
 $r = 0.16106$ cm, $\kappa = 300.00000$ Hz
 $D = 0.59706$ cm²/s, $a = 9.87359$ cm²/s, $x_0 = 0$ cm



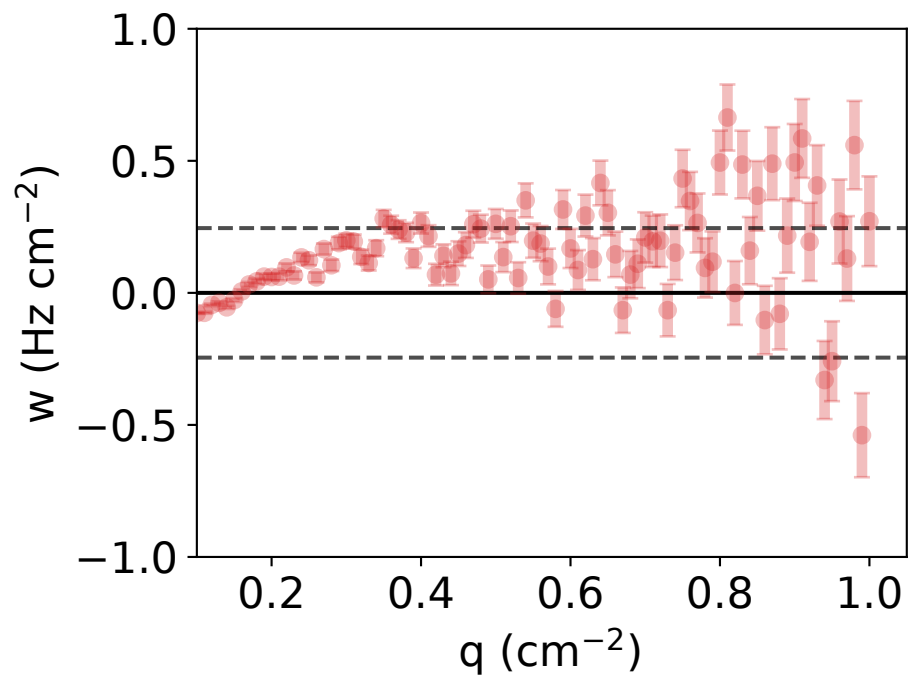
$\nu = 1.645 \pm 0.017$, $M = 16.599 \pm 0.722$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.245 Hz/cm²



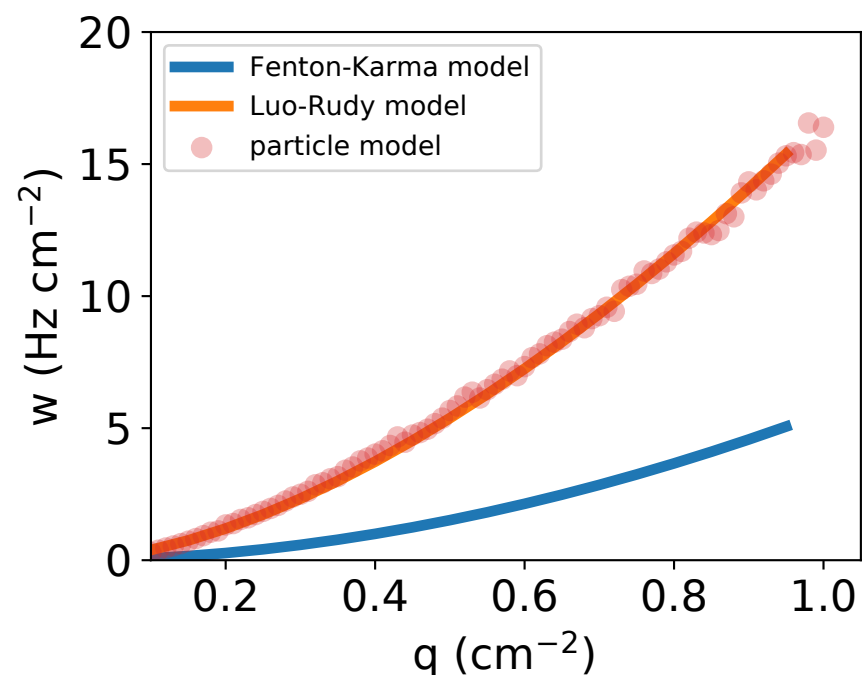
force_code=2, neighbors=0, reflect=0
 $r = 0.17975$ cm, $\kappa = 251.70000$ Hz
 $D = 0.80000$ cm²/s, $a = 10.08440$ cm²/s, $x_0 = 0$ cm



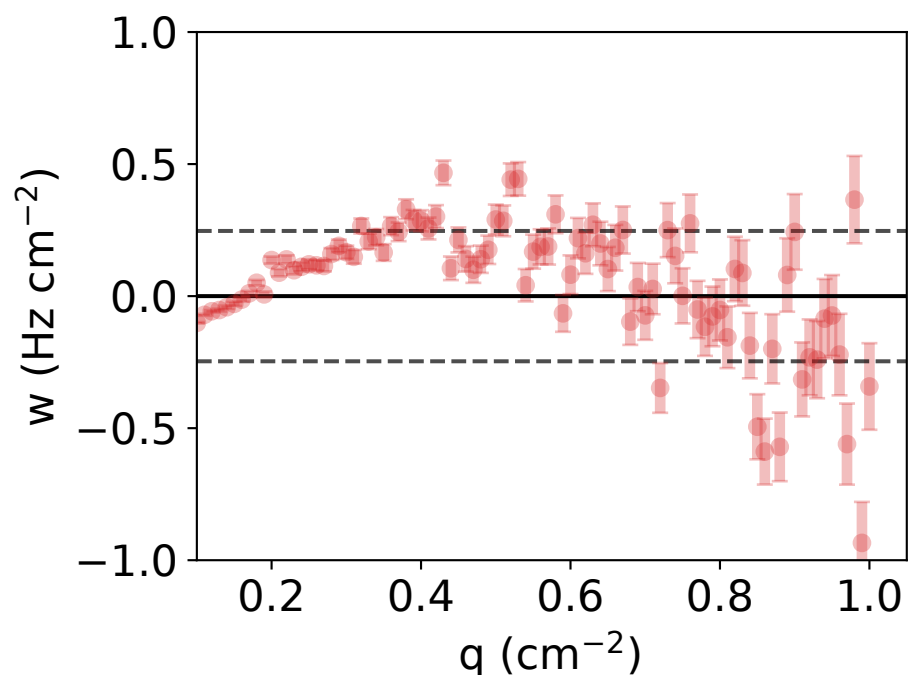
$\nu = 1.656 \pm 0.016$, $M = 16.752 \pm 0.664$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.245 Hz/cm²



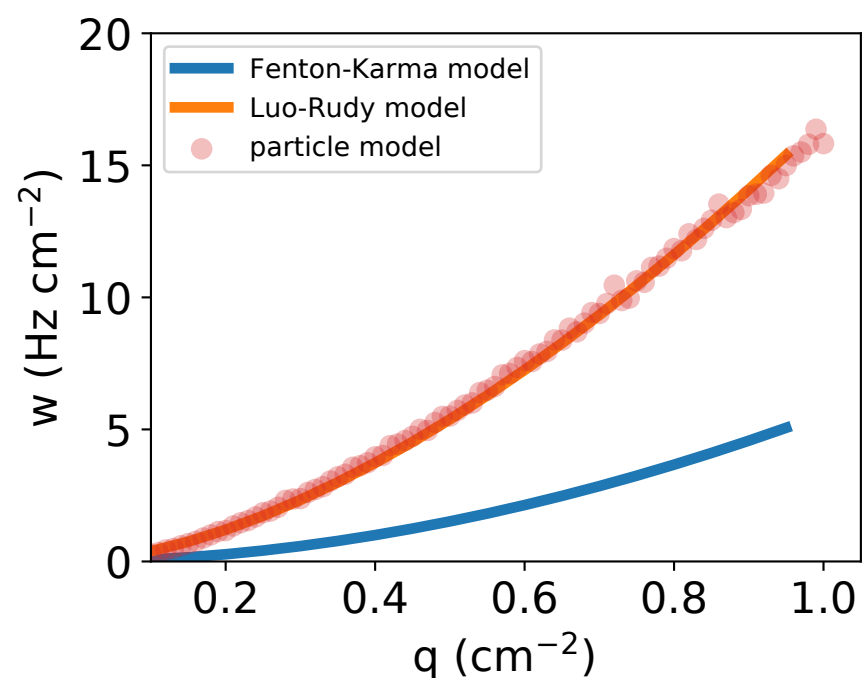
force_code=2, neighbors=0, reflect=0
 $r = 0.12957$ cm, $\kappa = 400.00000$ Hz
 $D = 0.31695$ cm²/s, $a = 9.24802$ cm²/s, $x_0 = 0$ cm



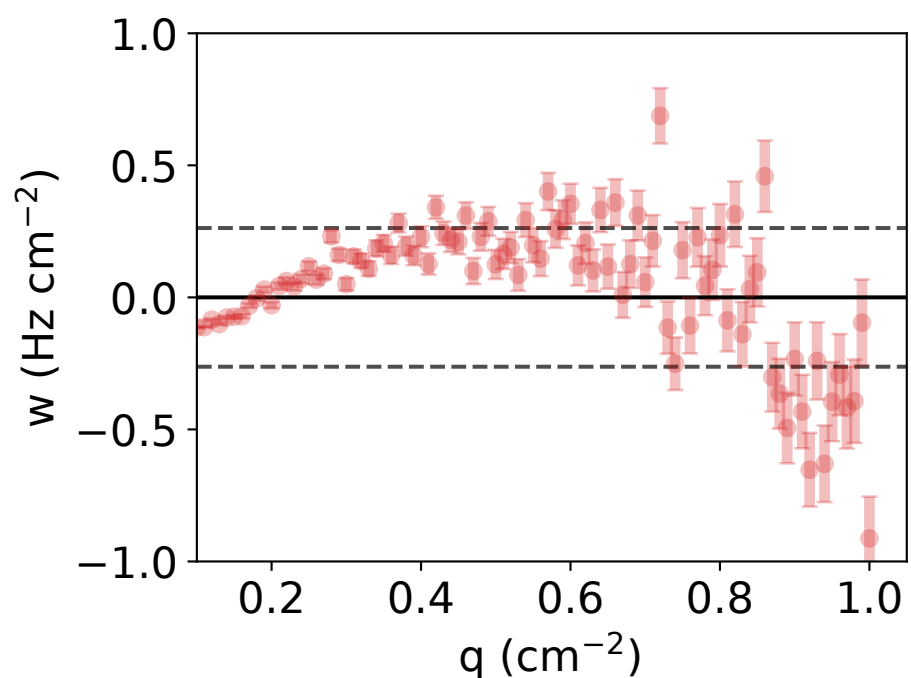
$\nu = 1.644 \pm 0.020$, $M = 16.184 \pm 0.818$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.247 Hz/cm²



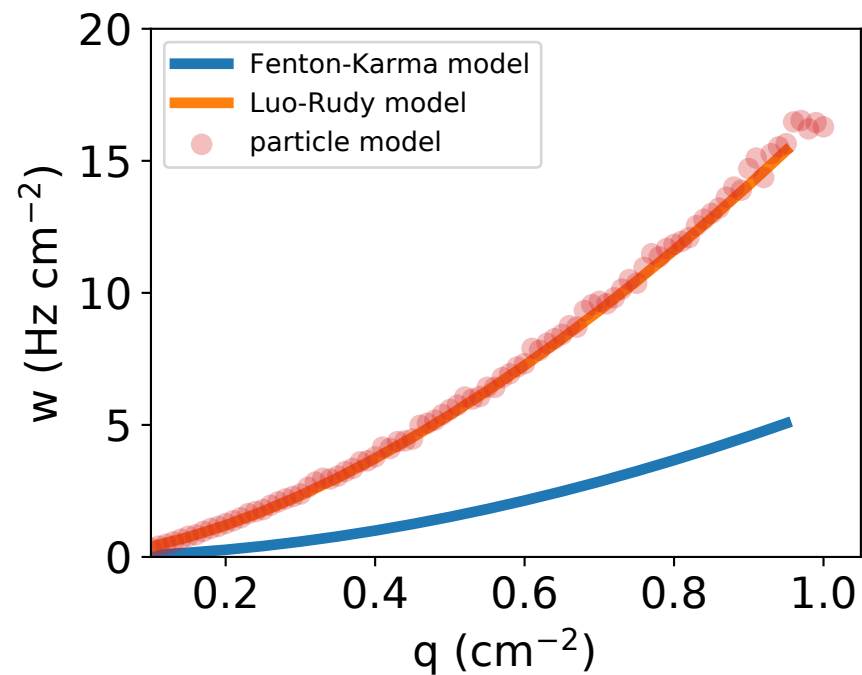
force_code=2, neighbors=0, reflect=0
 $r = 0.10784$ cm, $\kappa = 538.65600$ Hz
 $D = 0.47546$ cm²/s, $a = 8.08533$ cm²/s, $x_0 = 0$ cm



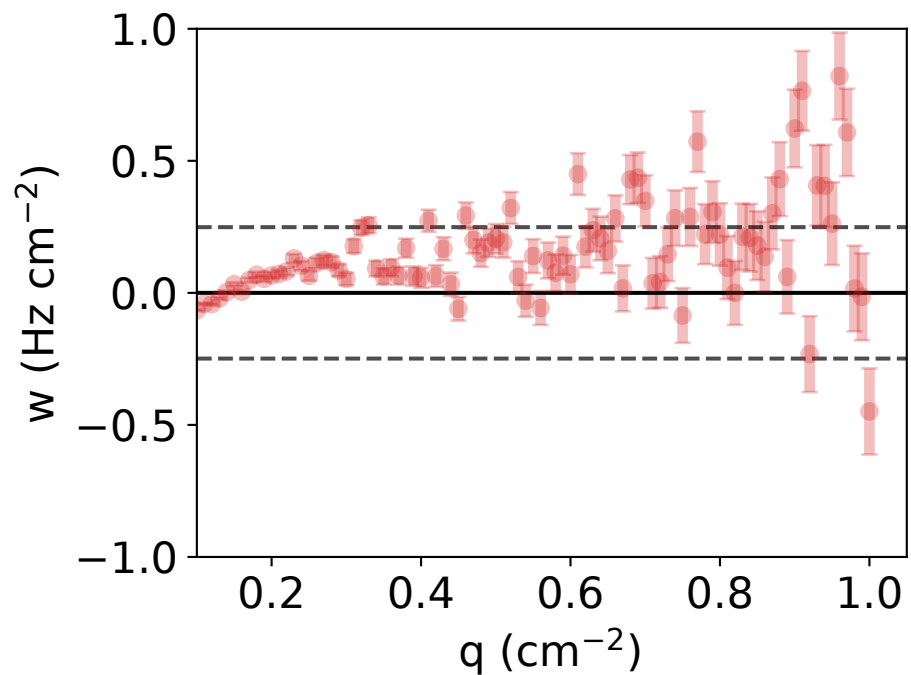
$\nu = 1.677 \pm 0.023$, $M = 16.182 \pm 0.921$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.263 Hz/cm²



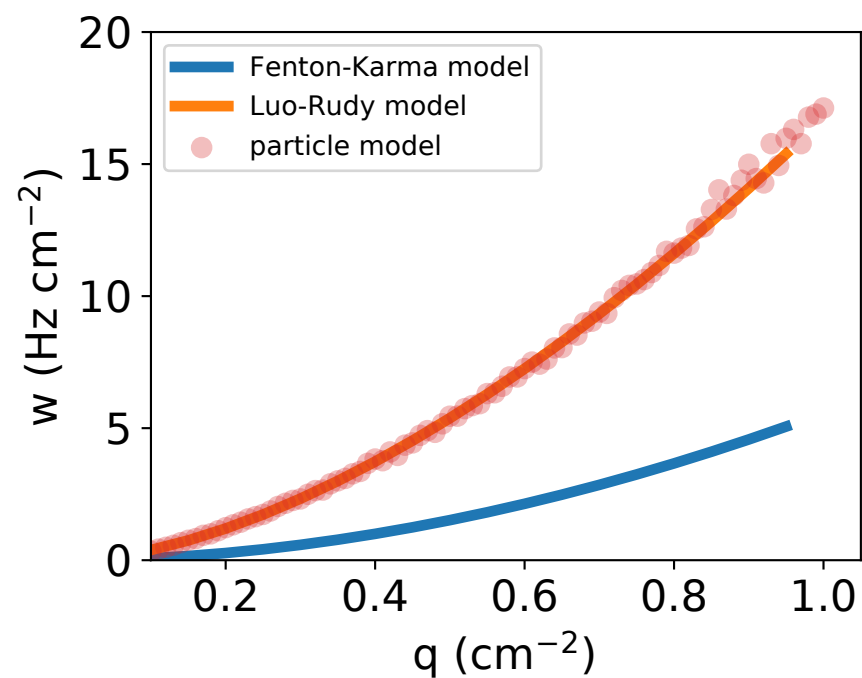
force_code=2, neighbors=0, reflect=0
 $r = 0.20689$ cm, $\kappa = 200.00000$ Hz
 $D = 0.65038$ cm²/s, $a = 10.86450$ cm²/s, $x_0 = 0$ cm



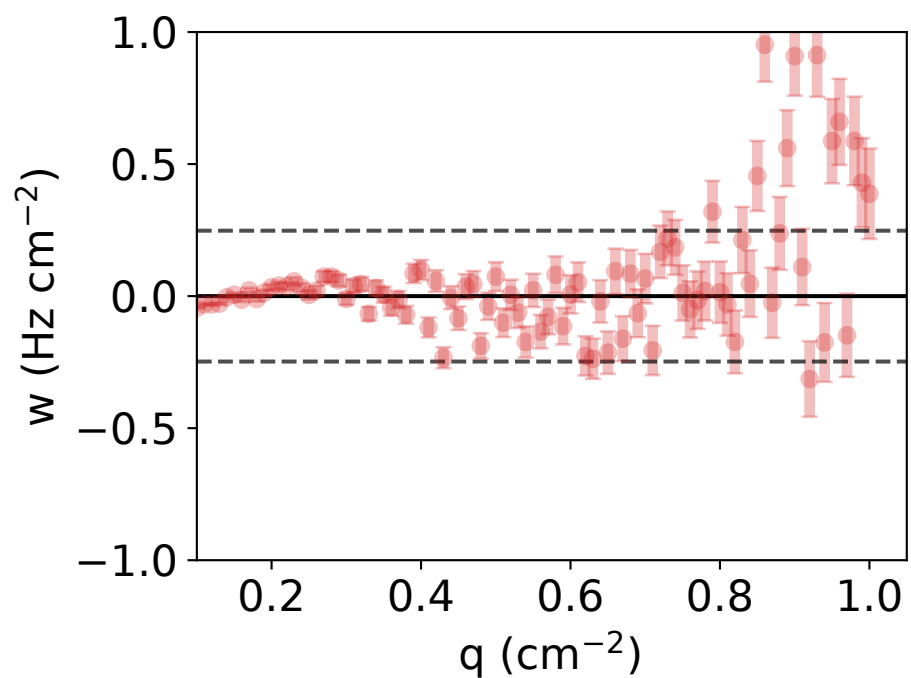
$\nu = 1.646 \pm 0.013$, $M = 16.897 \pm 0.559$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.249 Hz/cm²



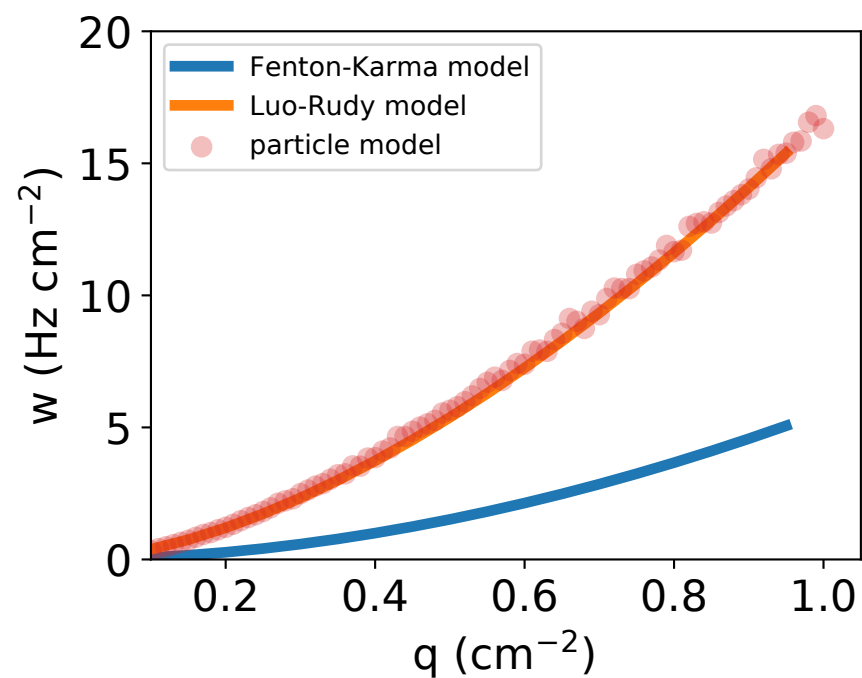
force_code=2, neighbors=0, reflect=0
 $r = 0.30876$ cm, $\kappa = 100.00000$ Hz
 $D = 0.40000$ cm²/s, $a = 13.98200$ cm²/s, $x_0 = 0$ cm



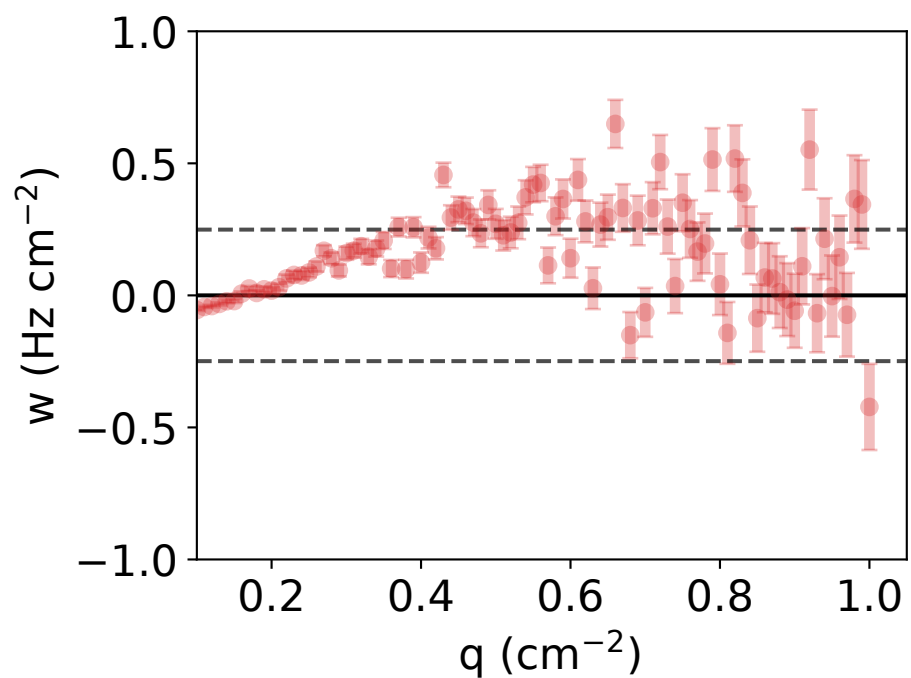
$\nu = 1.654 \pm 0.009$, $M = 17.040 \pm 0.474$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.248 Hz/cm²



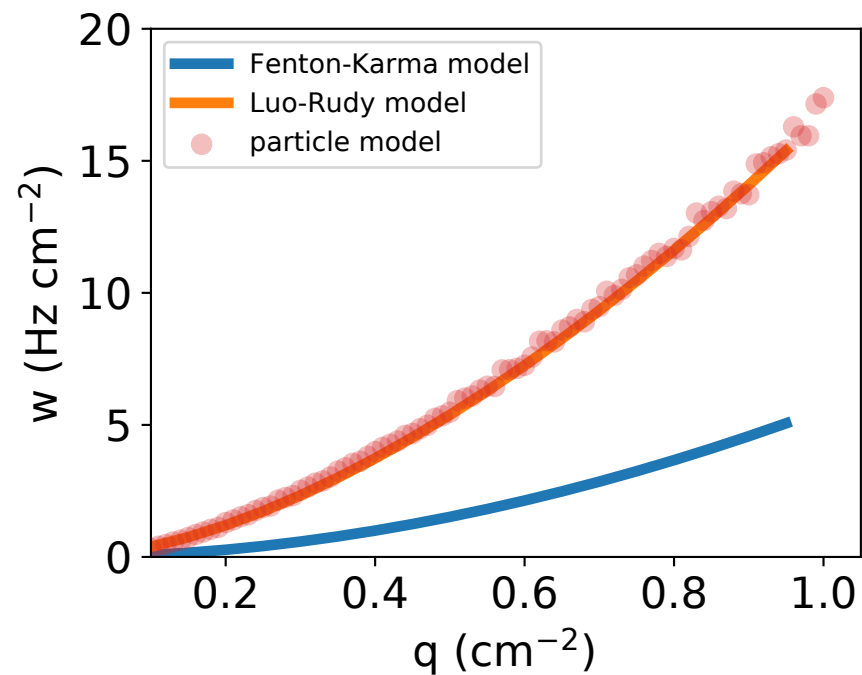
force_code=2, neighbors=0, reflect=0
 $r = 0.10559$ cm, $\kappa = 500.00000$ Hz
 $D = 0.00000$ cm²/s, $a = 16.01590$ cm²/s, $x_0 = 0$ cm



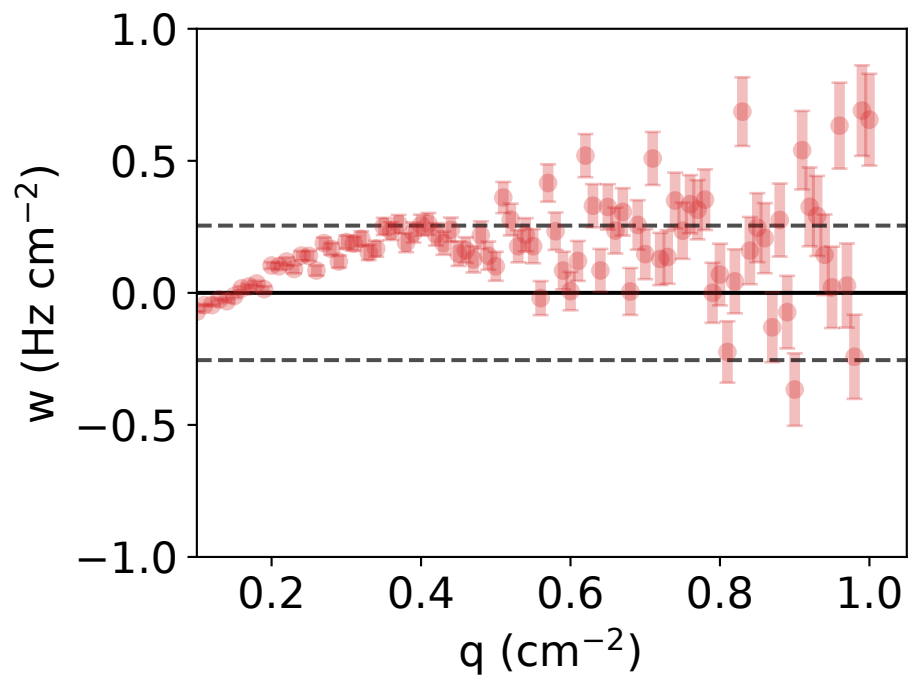
$\nu = 1.651 \pm 0.013$, $M = 16.697 \pm 0.591$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.249 Hz/cm²



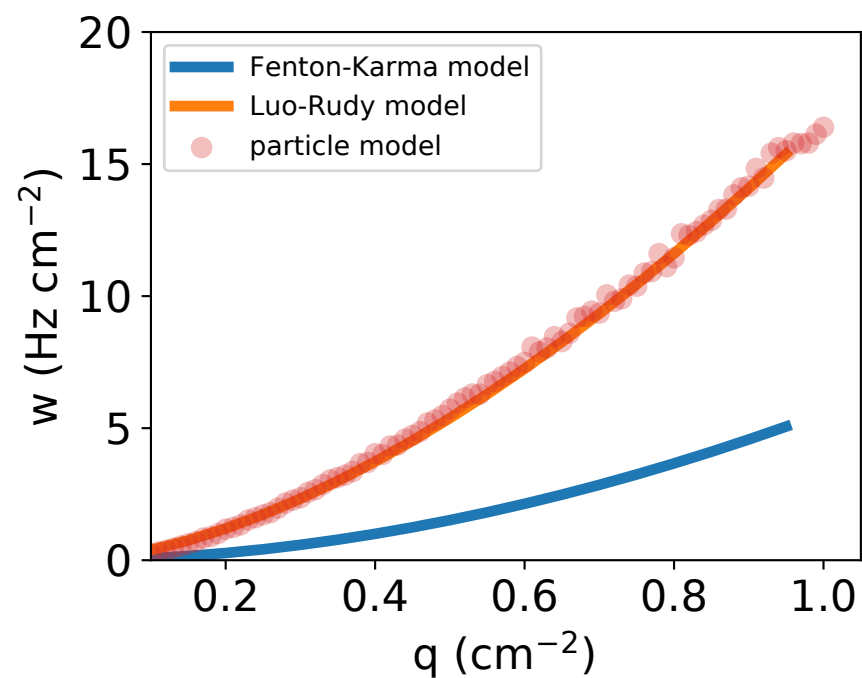
force_code=2, neighbors=0, reflect=0
 $r = 0.17926$ cm, $\kappa = 250.00000$ Hz
 $D = 0.59199$ cm²/s, $a = 10.39530$ cm²/s, $x_0 = 0$ cm



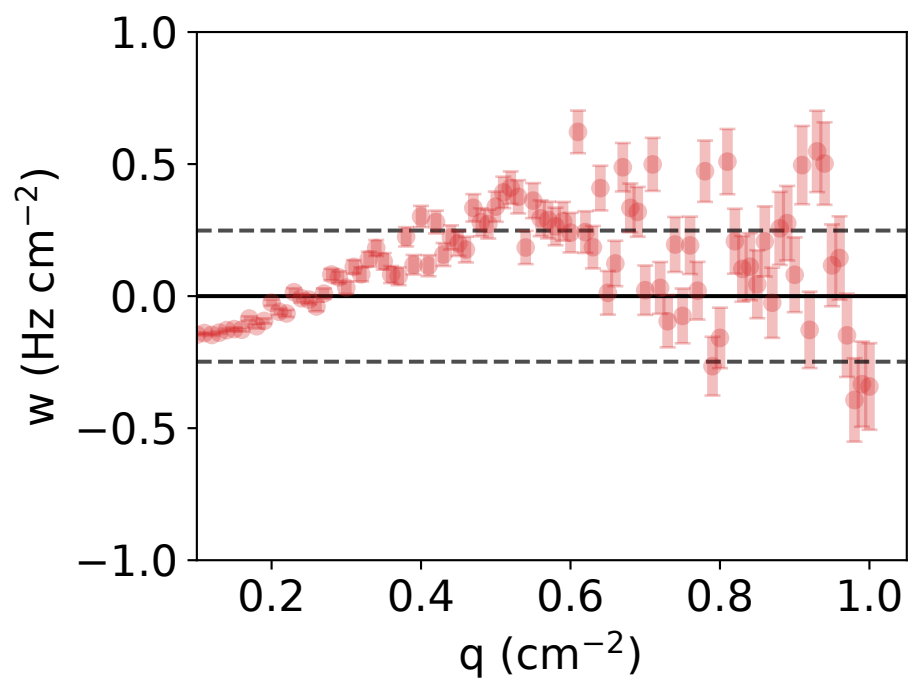
$\nu = 1.647 \pm 0.015$, $M = 16.777 \pm 0.626$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.255 Hz/cm²



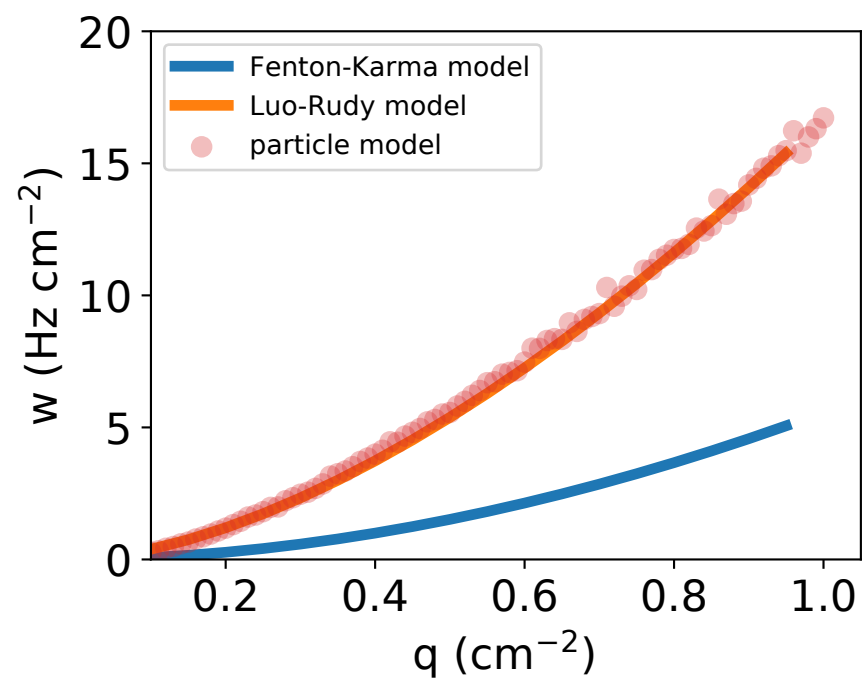
force_code=2, neighbors=0, reflect=0
 $r = 0.09474$ cm, $\kappa = 712.45100$ Hz
 $D = 0.52344$ cm²/s, $a = 7.06163$ cm²/s, $x_0 = 0$ cm



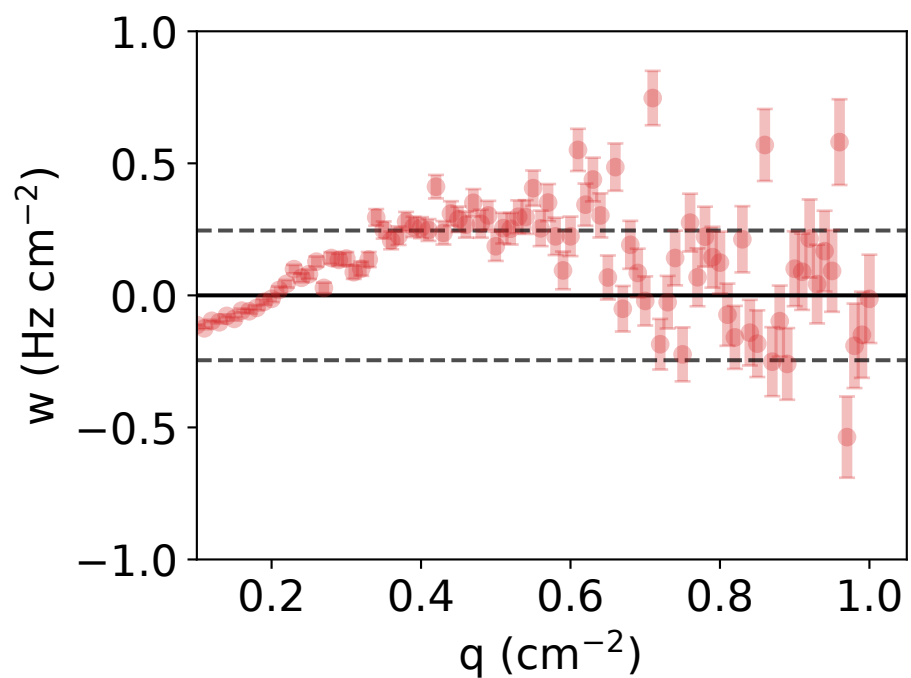
$\nu = 1.737 \pm 0.025$, $M = 16.576 \pm 1.038$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.248 Hz/cm²



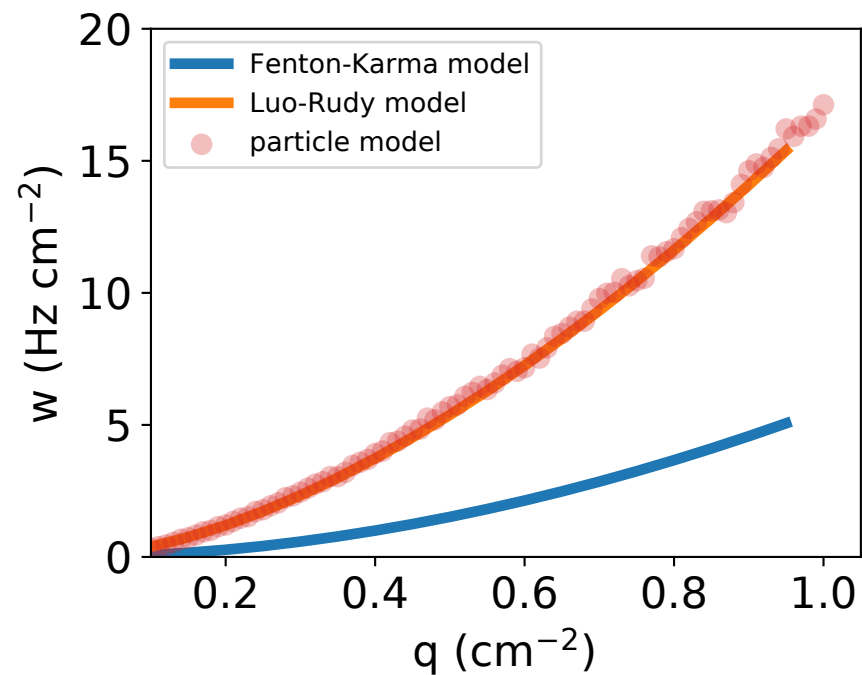
force_code=2, neighbors=0, reflect=0
 $r = 0.09902$ cm, $\kappa = 620.63800$ Hz
 $D = 0.44709$ cm²/s, $a = 7.89595$ cm²/s, $x_0 = 0$ cm



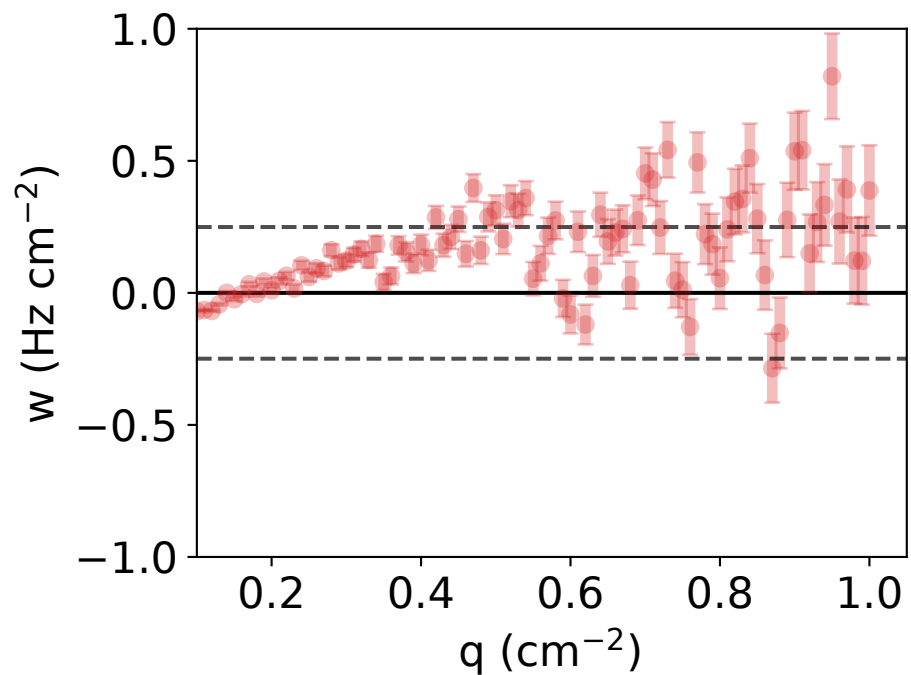
$\nu = 1.692 \pm 0.023$, $M = 16.451 \pm 0.940$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.246 Hz/cm²



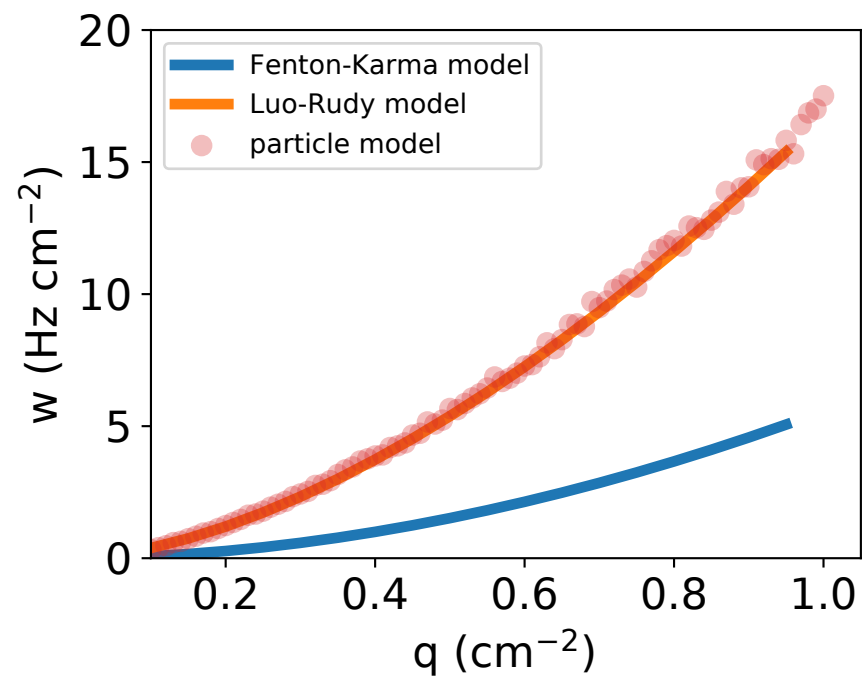
force_code=2, neighbors=0, reflect=0
 $r = 0.18558$ cm, $\kappa = 243.63900$ Hz
 $D = 0.27273$ cm²/s, $a = 10.24660$ cm²/s, $x_0 = 0$ cm



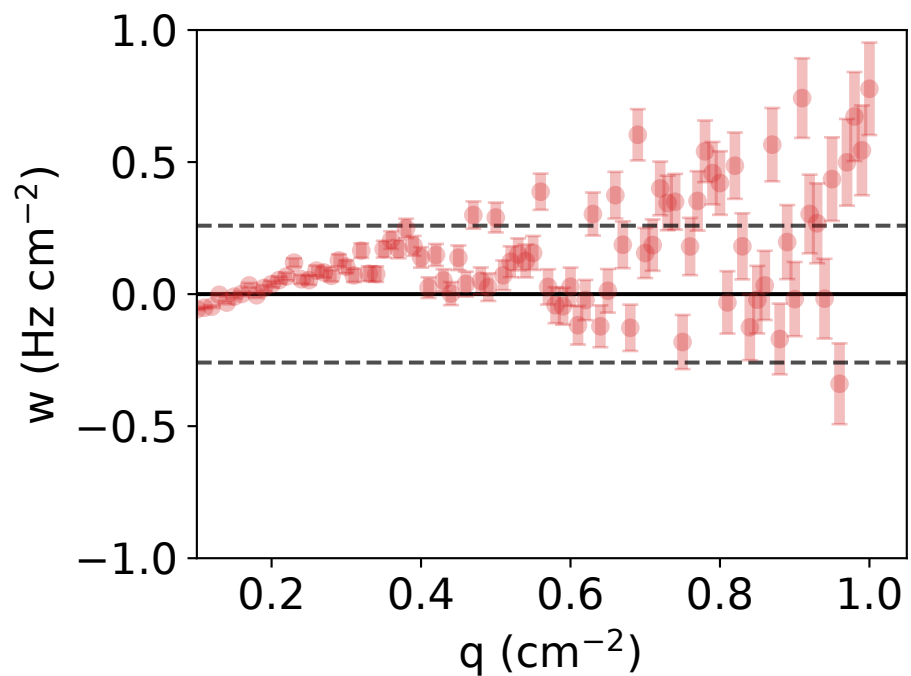
$\nu = 1.663 \pm 0.014$, $M = 16.886 \pm 0.592$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.249 Hz/cm²



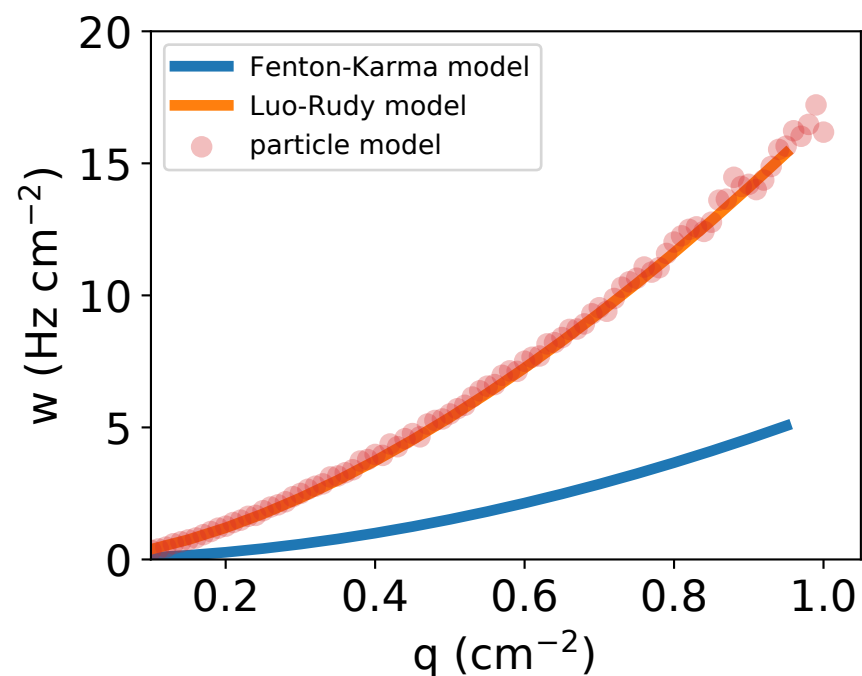
force_code=2, neighbors=0, reflect=0
 $r = 0.20676$ cm, $\kappa = 200.00000$ Hz
 $D = 0.69257$ cm²/s, $a = 10.74370$ cm²/s, $x_0 = 0$ cm



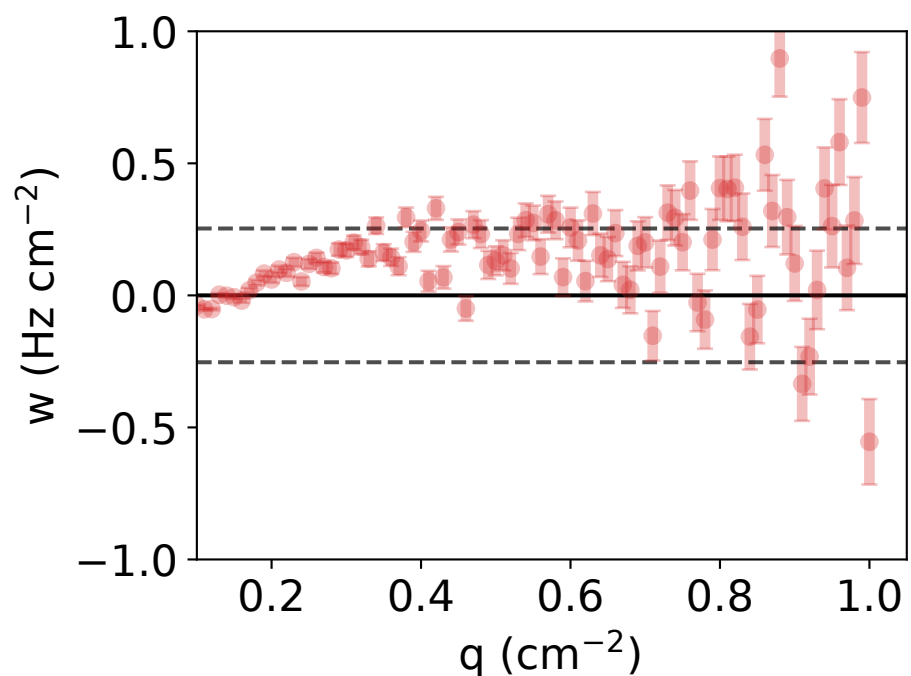
$\nu = 1.655 \pm 0.012$, $M = 16.950 \pm 0.548$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.259 Hz/cm²



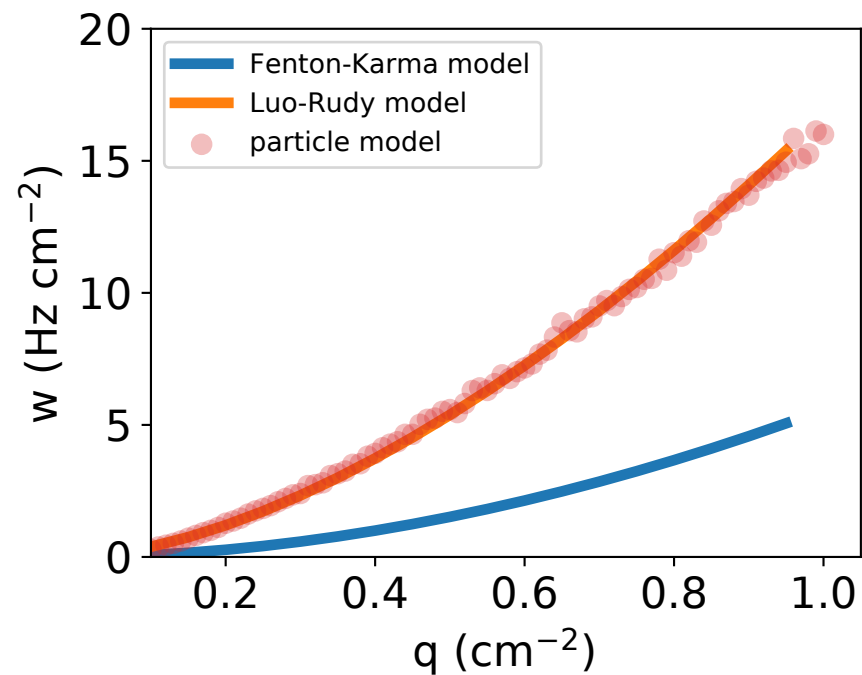
force_code=2, neighbors=0, reflect=0
 $r = 0.20696$ cm, $\kappa = 200.18800$ Hz
 $D = 0.60038$ cm²/s, $a = 10.98840$ cm²/s, $x_0 = 0$ cm



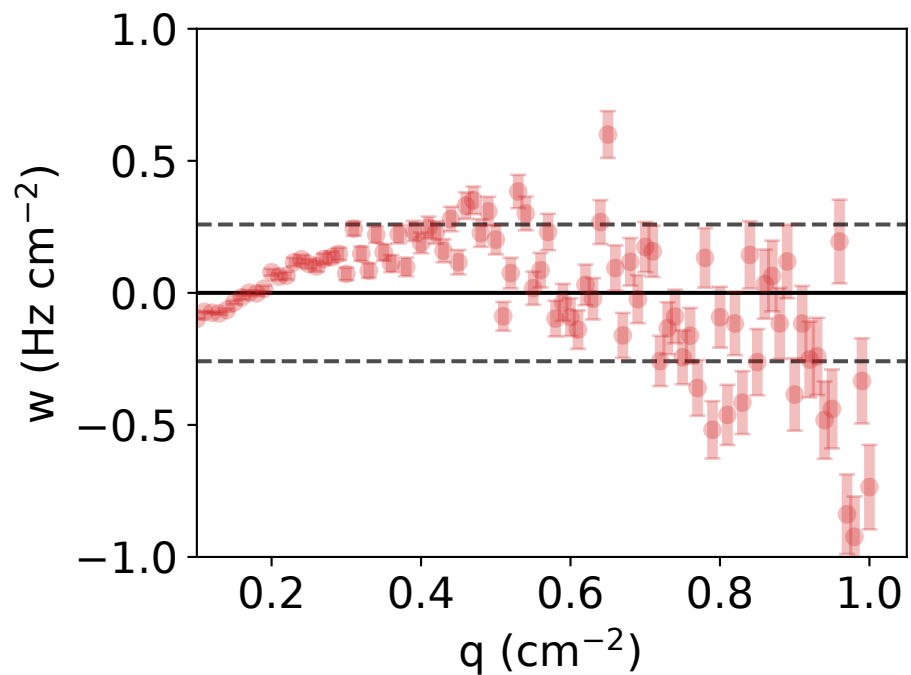
$\nu = 1.642 \pm 0.013$, $M = 16.795 \pm 0.570$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.253 Hz/cm²



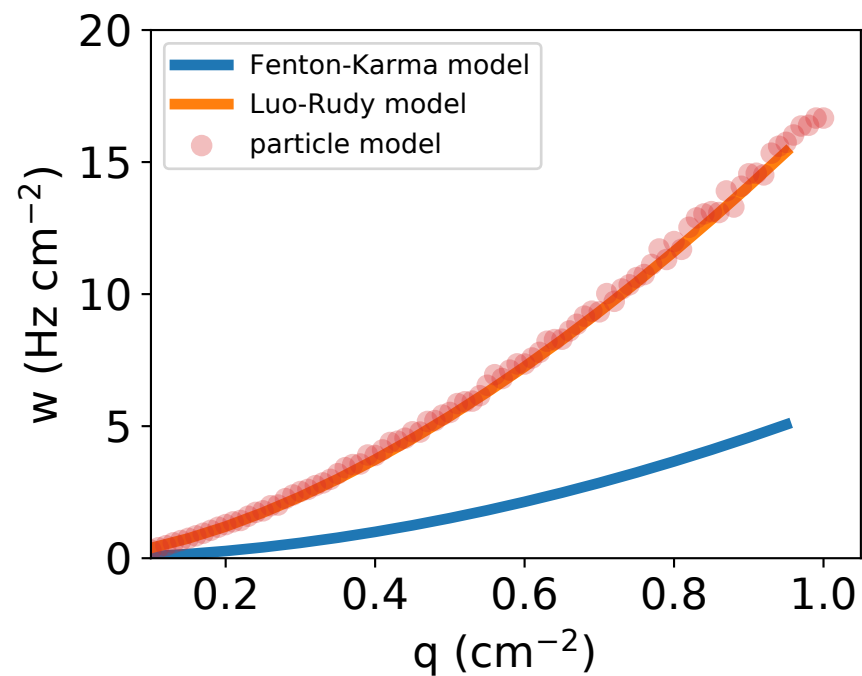
force_code=2, neighbors=0, reflect=0
 $r = 0.13115$ cm, $\kappa = 390.31300$ Hz
 $D = 0.46771$ cm²/s, $a = 8.99869$ cm²/s, $x_0 = 0$ cm



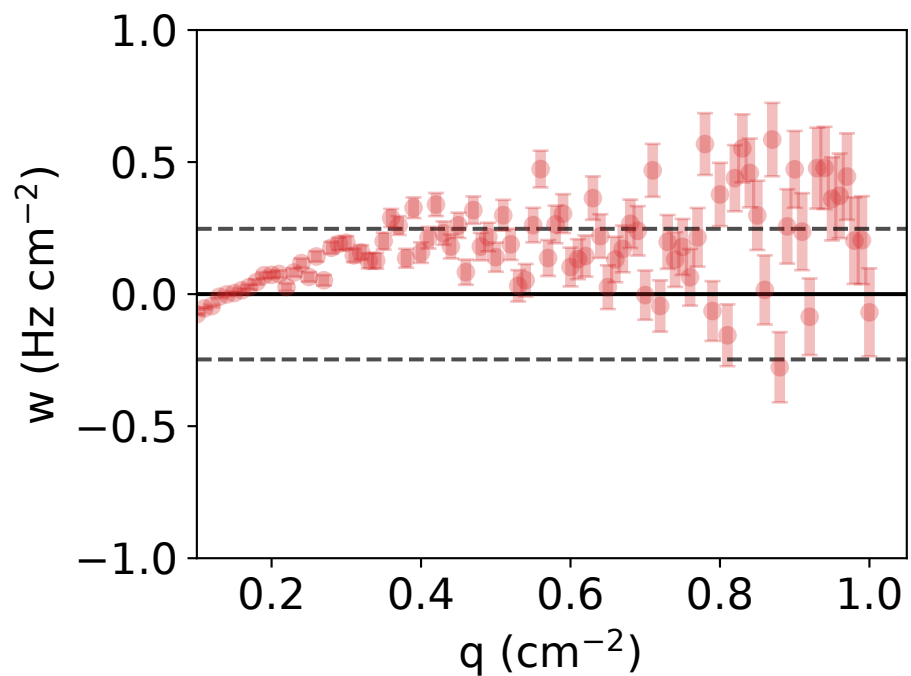
$\nu = 1.650 \pm 0.020$, $M = 16.094 \pm 0.810$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.259 Hz/cm²



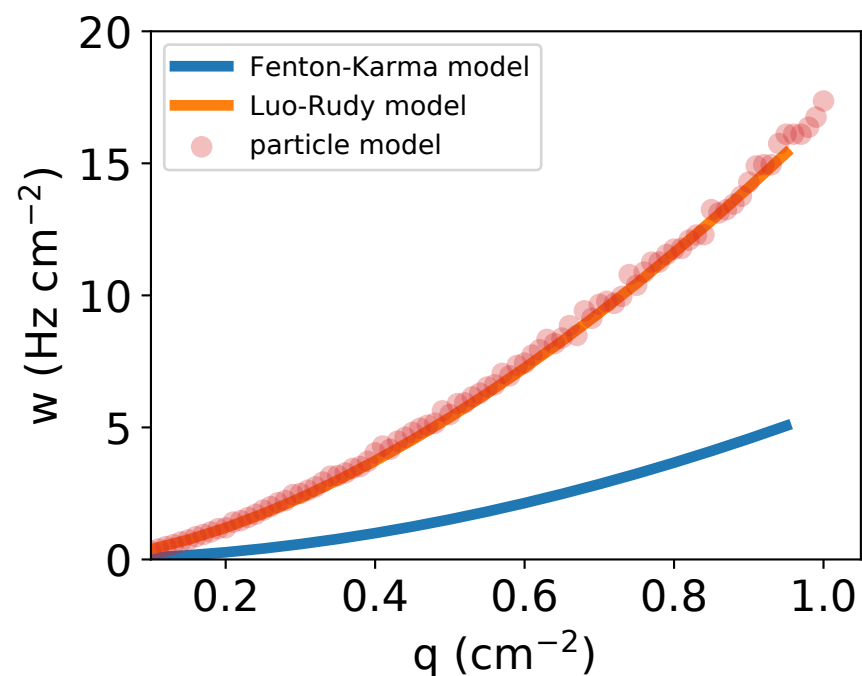
force_code=2, neighbors=0, reflect=0
 $r = 0.19092$ cm, $\kappa = 227.73900$ Hz
 $D = 0.68904$ cm²/s, $a = 10.47570$ cm²/s, $x_0 = 0$ cm



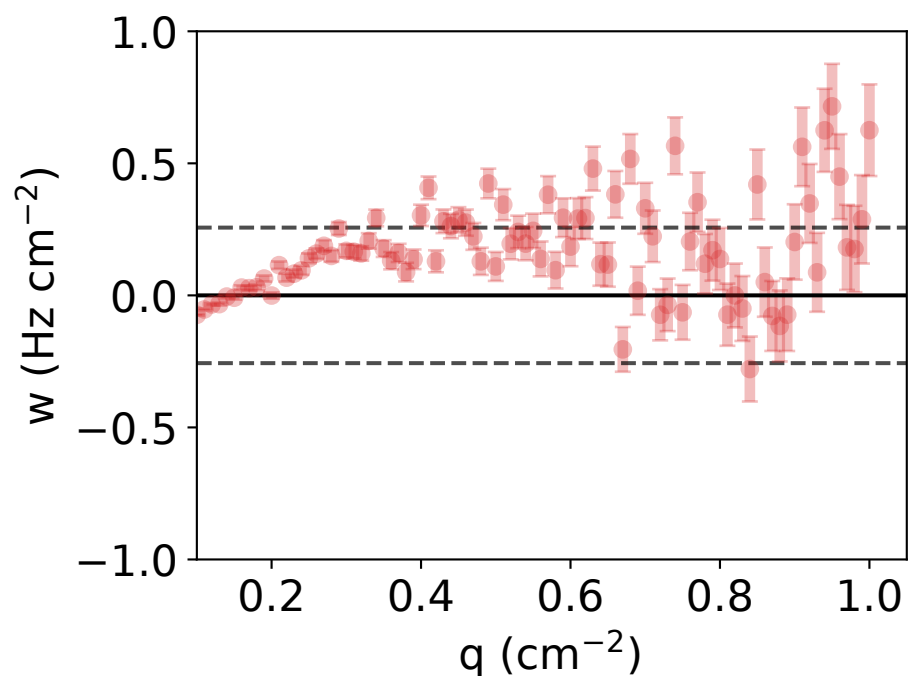
$\nu = 1.649 \pm 0.014$, $M = 16.836 \pm 0.597$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.247 Hz/cm²



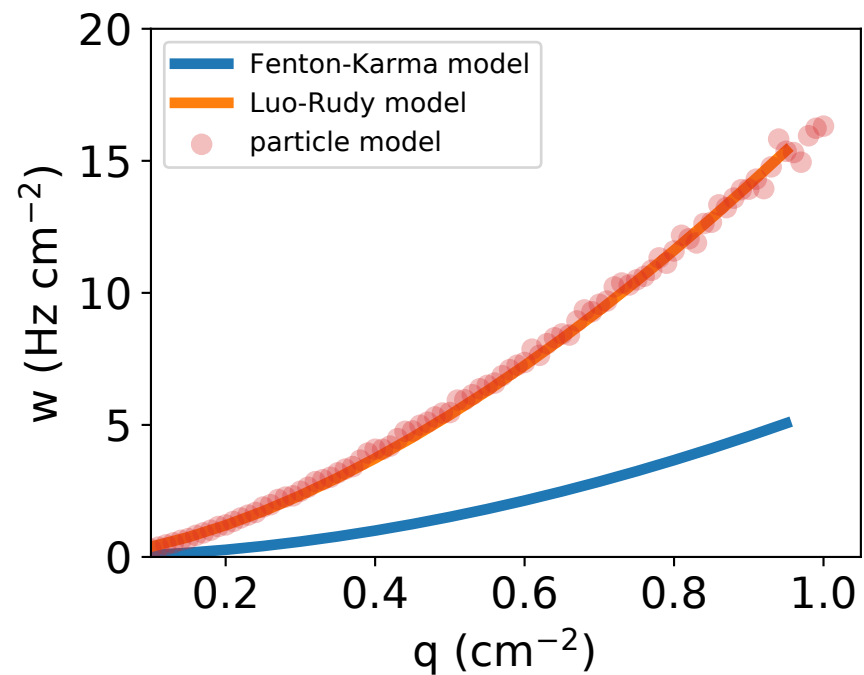
force_code=2, neighbors=0, reflect=0
 $r = 0.17976$ cm, $\kappa = 250.00000$ Hz
 $D = 0.50000$ cm²/s, $a = 10.44810$ cm²/s, $x_0 = 0$ cm



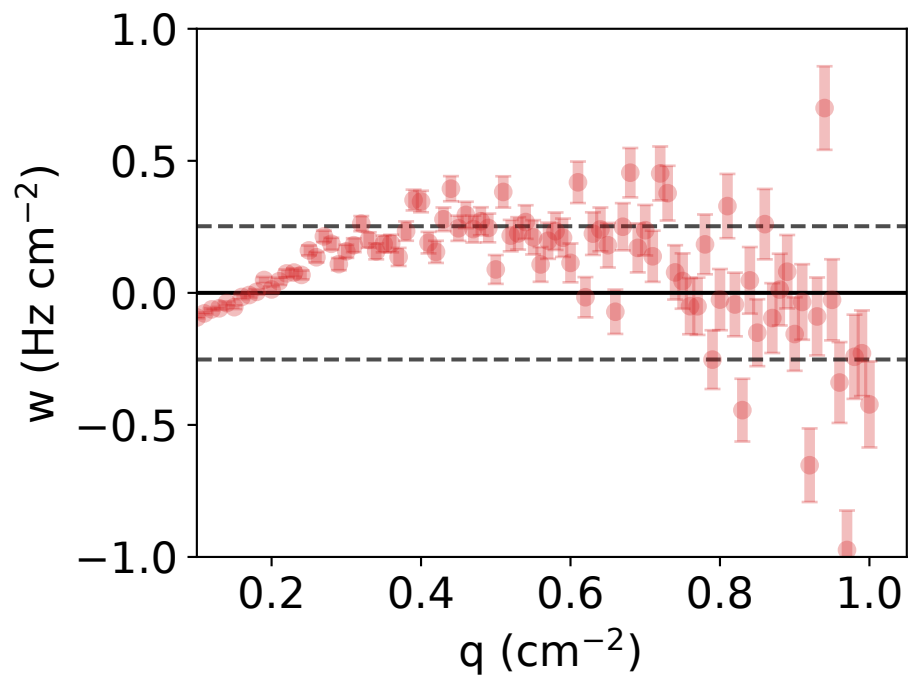
$\nu = 1.646 \pm 0.015$, $M = 16.775 \pm 0.647$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.257 Hz/cm²



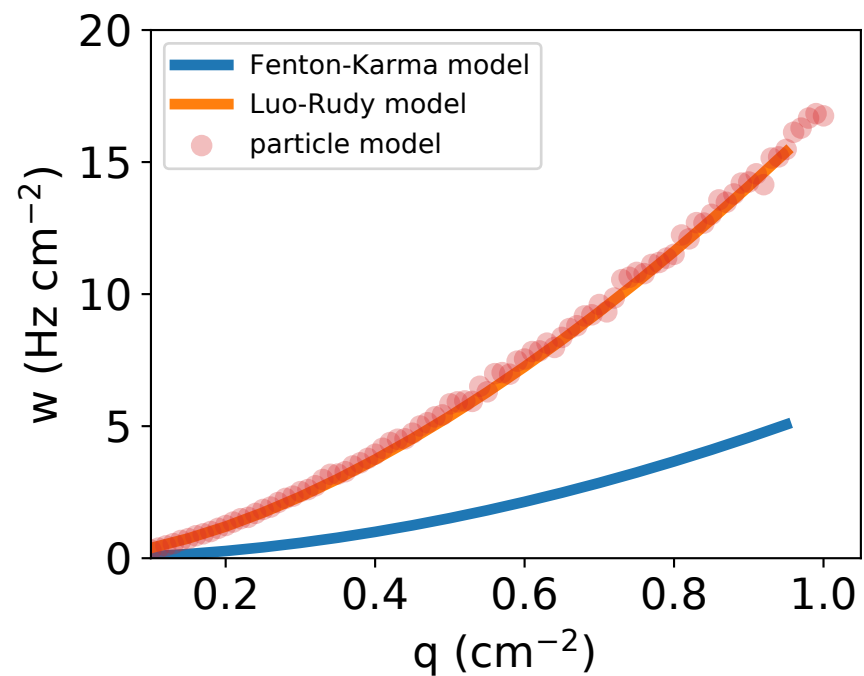
force_code=2, neighbors=0, reflect=0
 $r = 0.11282$ cm, $\kappa = 486.17500$ Hz
 $D = 0.28341$ cm²/s, $a = 8.86789$ cm²/s, $x_0 = 0$ cm



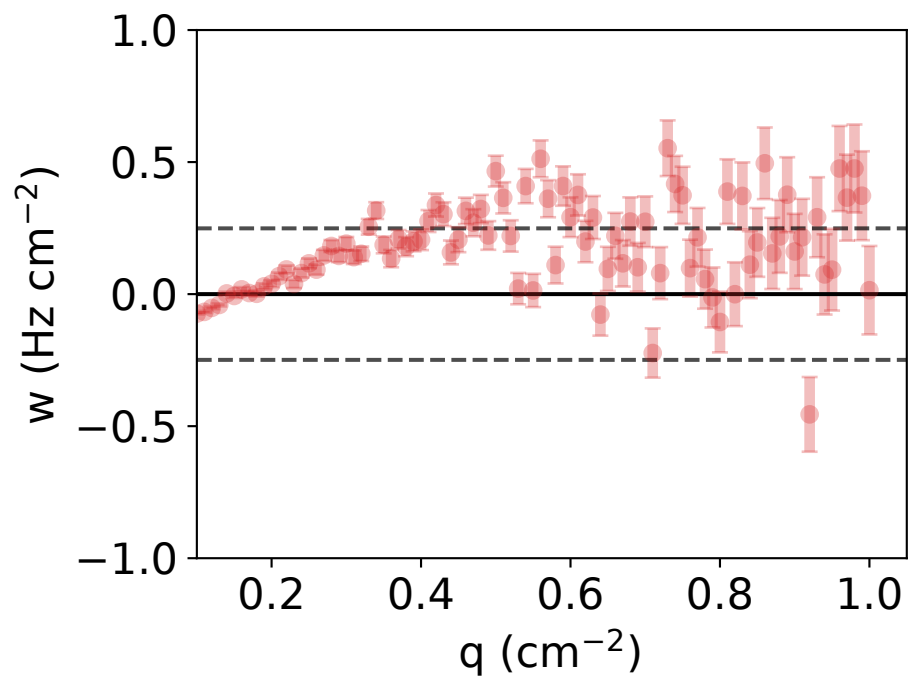
$\nu = 1.656 \pm 0.019$, $M = 16.321 \pm 0.800$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.252 Hz/cm²



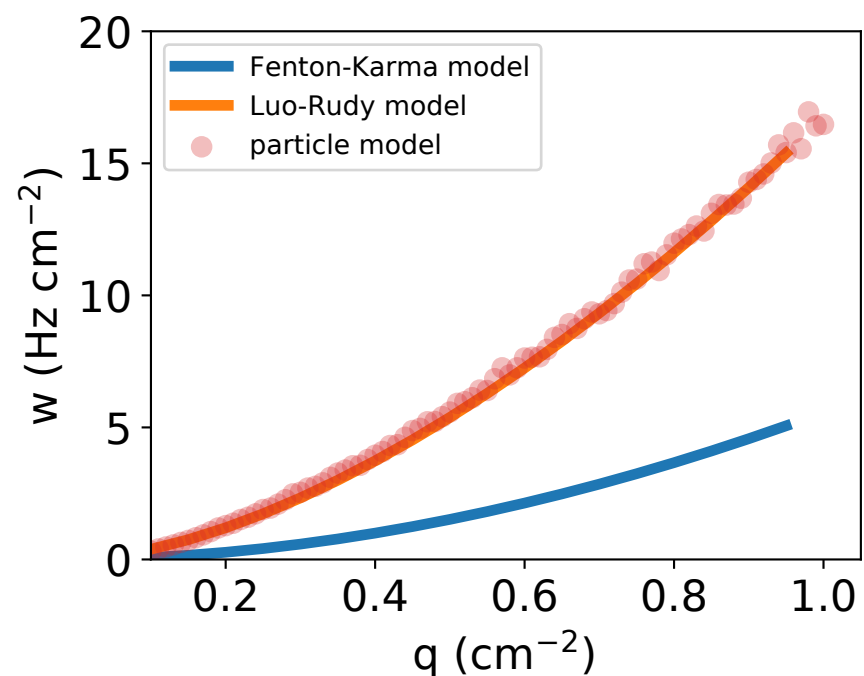
force_code=2, neighbors=0, reflect=0
 $r = 0.16133$ cm, $\kappa = 300.00000$ Hz
 $D = 0.60000$ cm²/s, $a = 9.82586$ cm²/s, $x_0 = 0$ cm



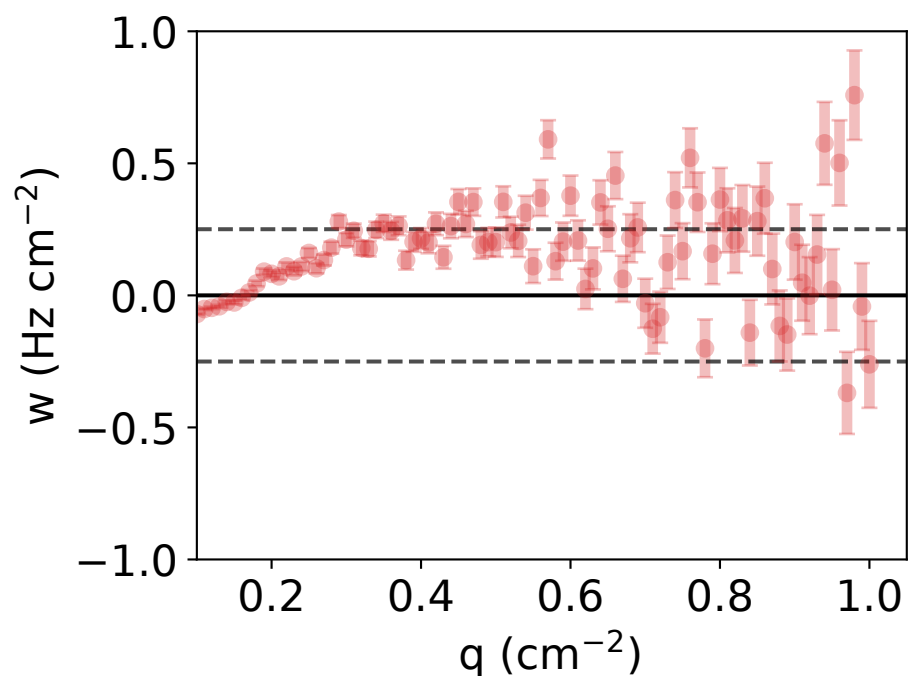
$\nu = 1.654 \pm 0.016$, $M = 16.747 \pm 0.655$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.249 Hz/cm²



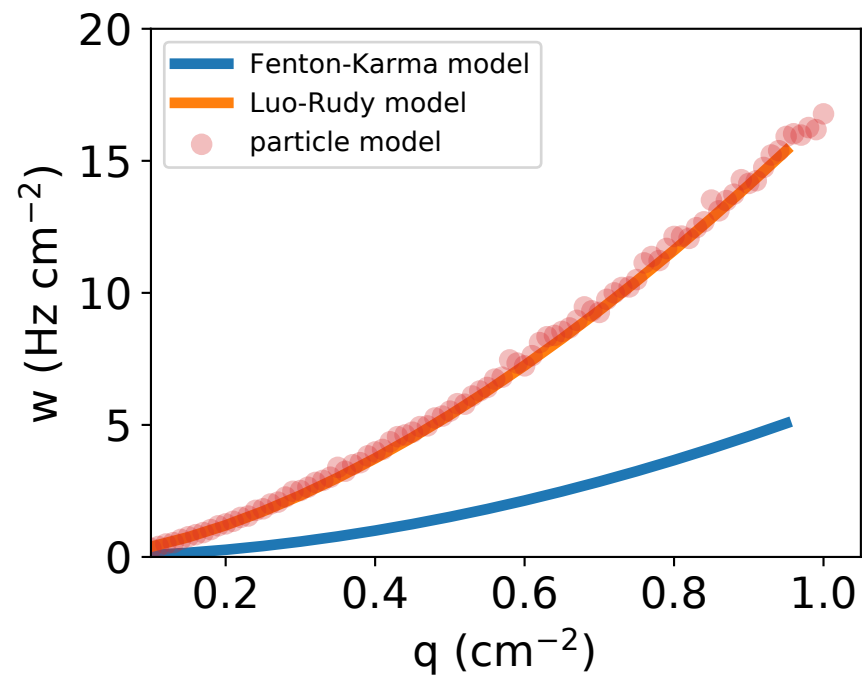
force_code=2, neighbors=0, reflect=0
 $r = 0.15858$ cm, $\kappa = 304.00200$ Hz
 $D = 0.50600$ cm²/s, $a = 9.80867$ cm²/s, $x_0 = 0$ cm



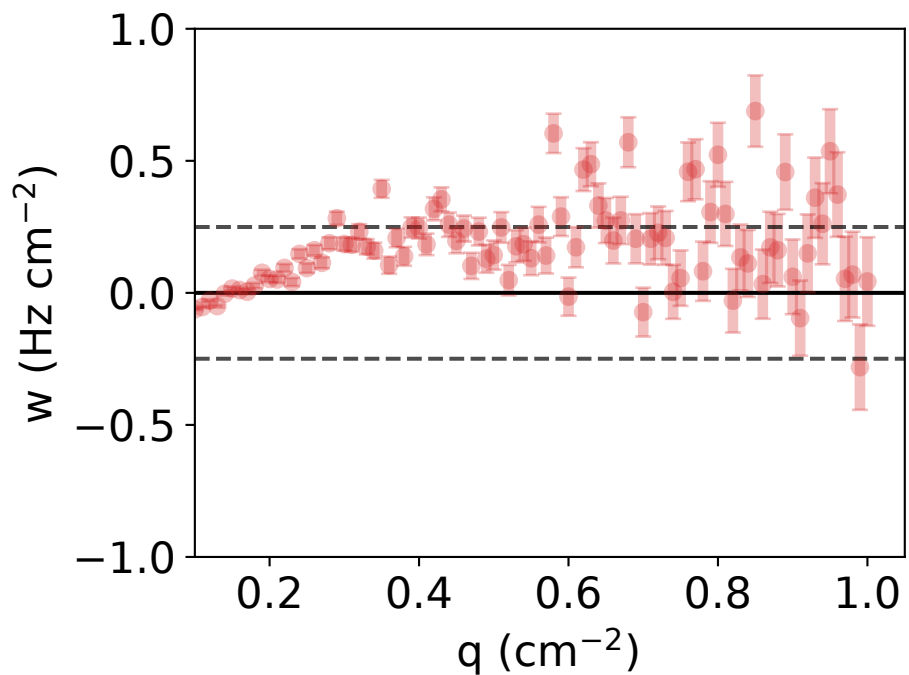
$\nu = 1.646 \pm 0.016$, $M = 16.649 \pm 0.677$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.251 Hz/cm²



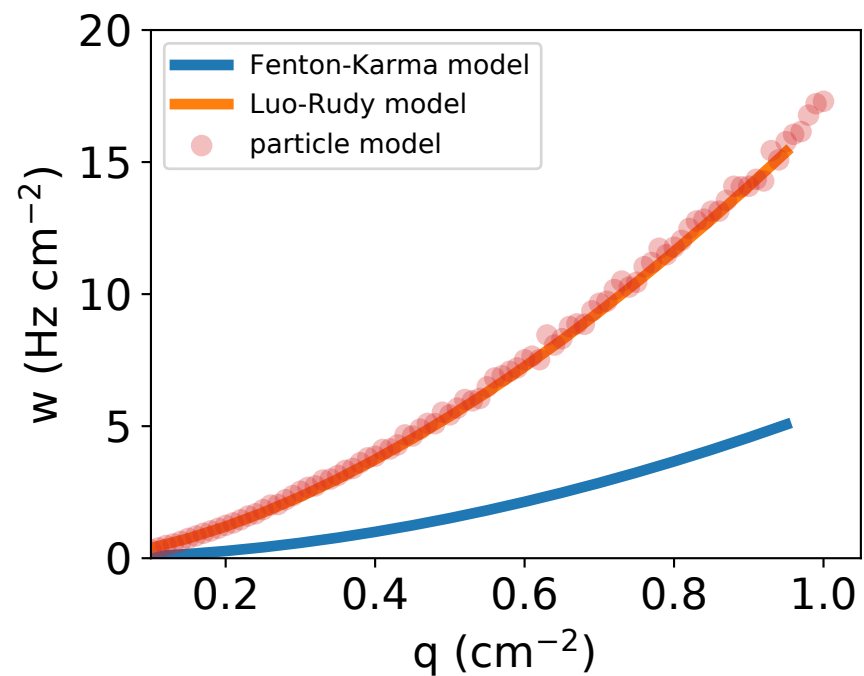
force_code=2, neighbors=0, reflect=0
 $r = 0.17164$ cm, $\kappa = 272.68700$ Hz
 $D = 0.70925$ cm²/s, $a = 9.97093$ cm²/s, $x_0 = 0$ cm



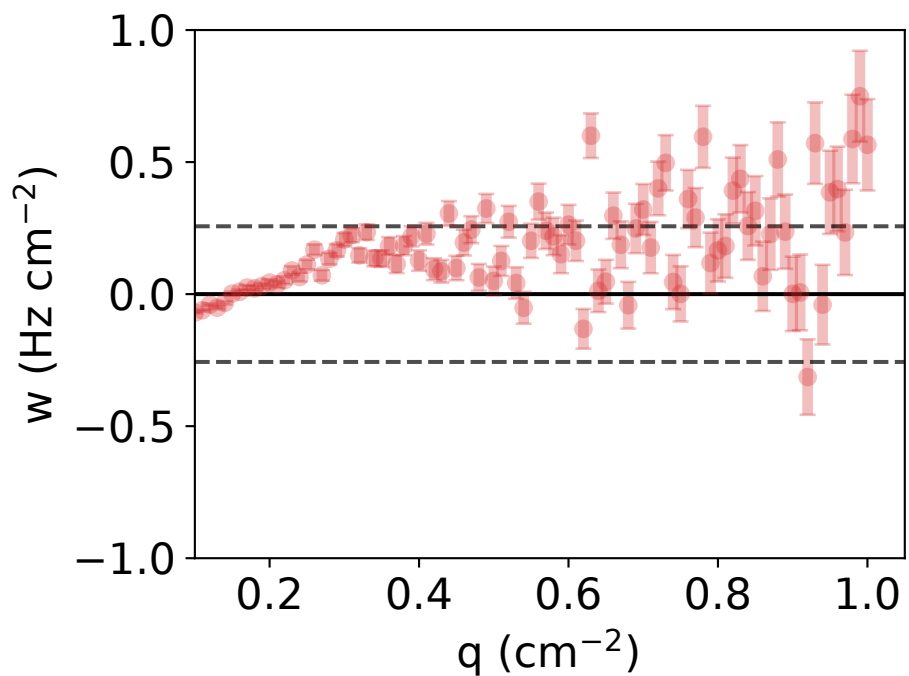
$\nu = 1.646 \pm 0.015$, $M = 16.760 \pm 0.617$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.249 Hz/cm²



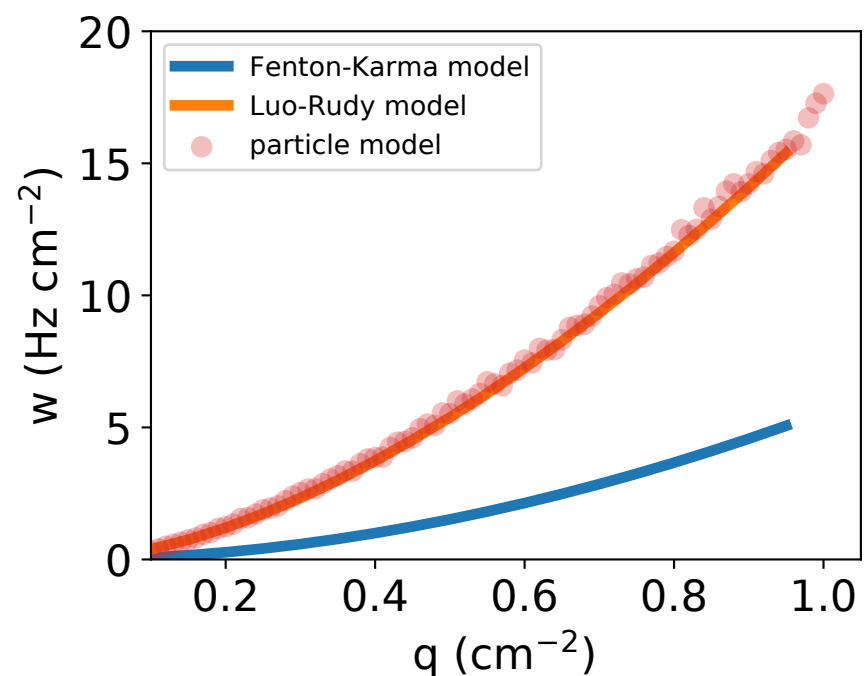
force_code=2, neighbors=0, reflect=0
 $r = 0.18021$ cm, $\kappa = 250.00000$ Hz
 $D = 0.80000$ cm²/s, $a = 10.09140$ cm²/s, $x_0 = 0$ cm



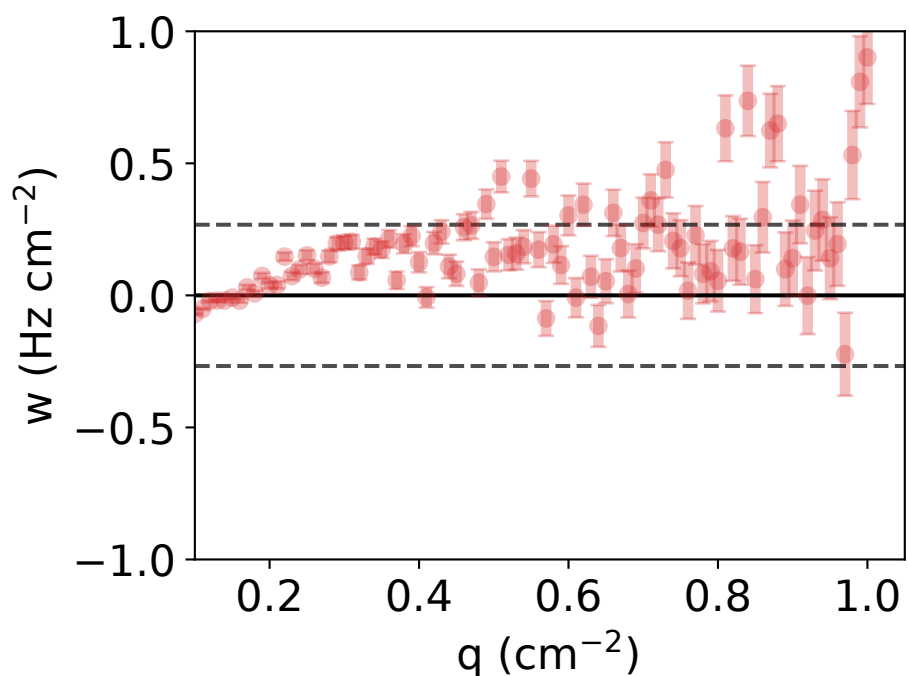
$\nu = 1.658 \pm 0.014$, $M = 16.912 \pm 0.592$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.257 Hz/cm²



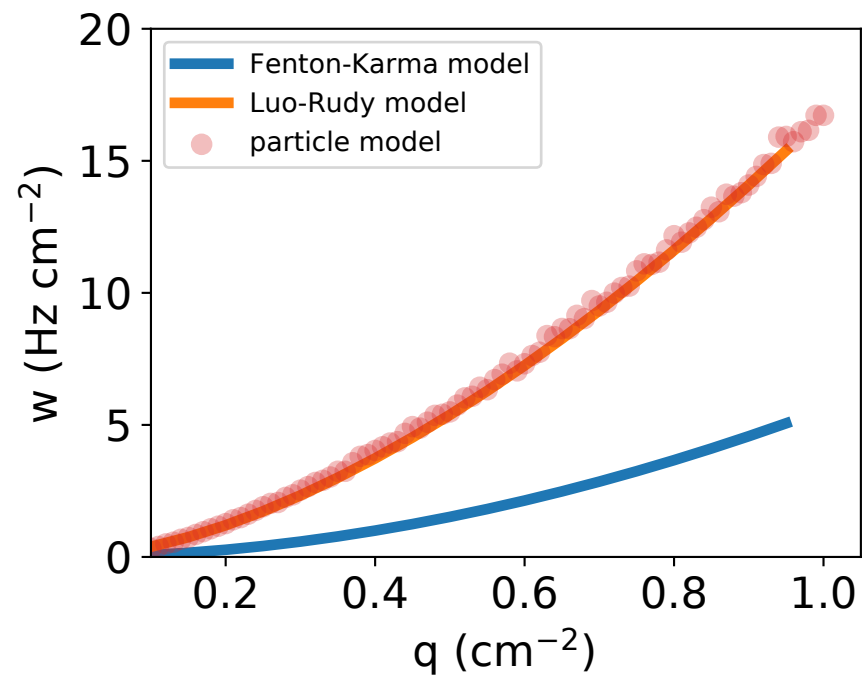
force_code=2, neighbors=0, reflect=0
 $r = 0.20084$ cm, $\kappa = 211.80500$ Hz
 $D = 0.60556$ cm²/s, $a = 10.66930$ cm²/s, $x_0 = 0$ cm



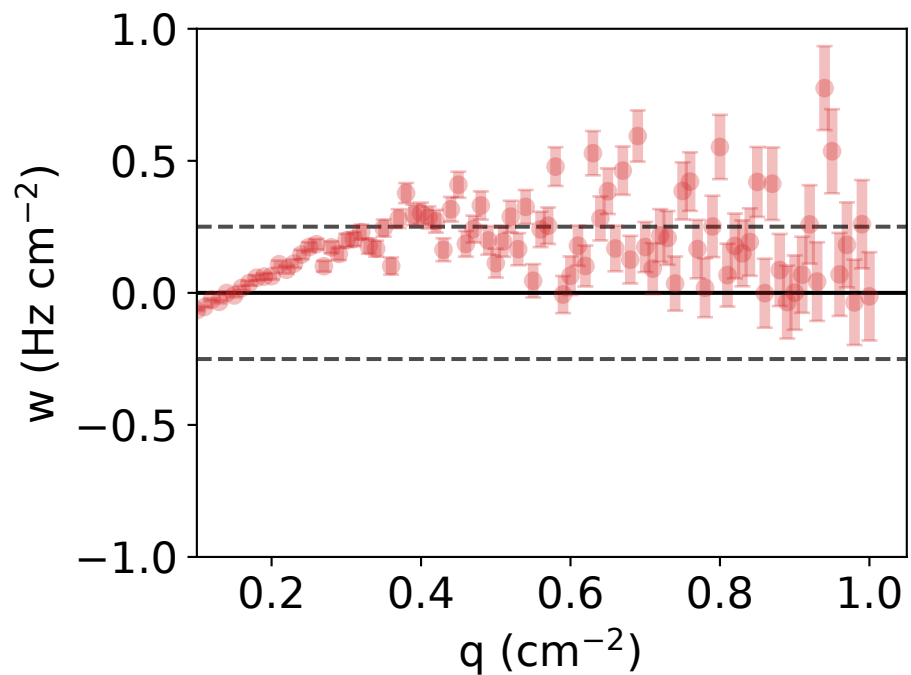
$\nu = 1.652 \pm 0.014$, $M = 16.931 \pm 0.589$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.268 Hz/cm²



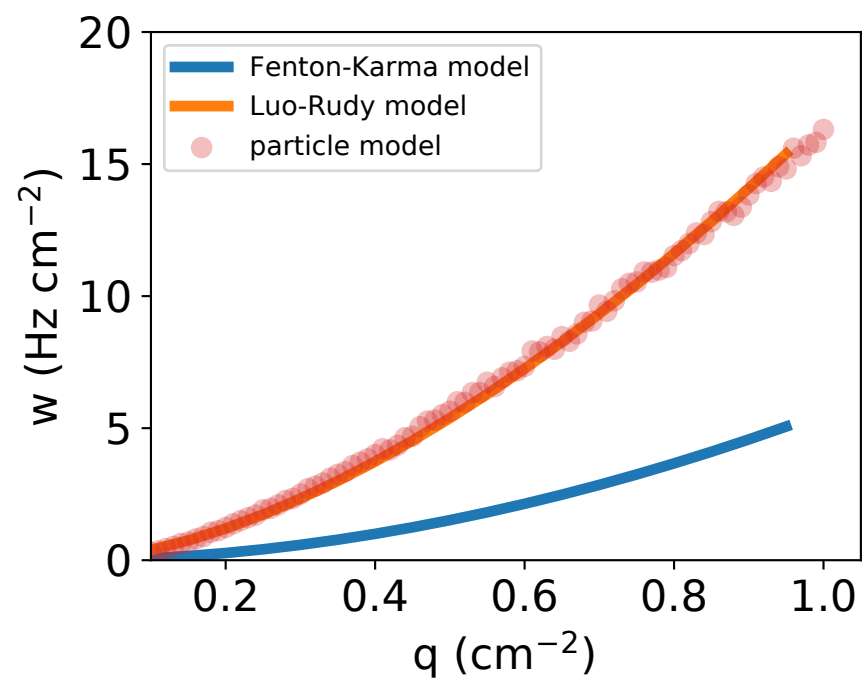
force_code=2, neighbors=0, reflect=0
 $r = 0.16624$ cm, $\kappa = 284.15700$ Hz
 $D = 0.64157$ cm²/s, $a = 10.01260$ cm²/s, $x_0 = 0$ cm



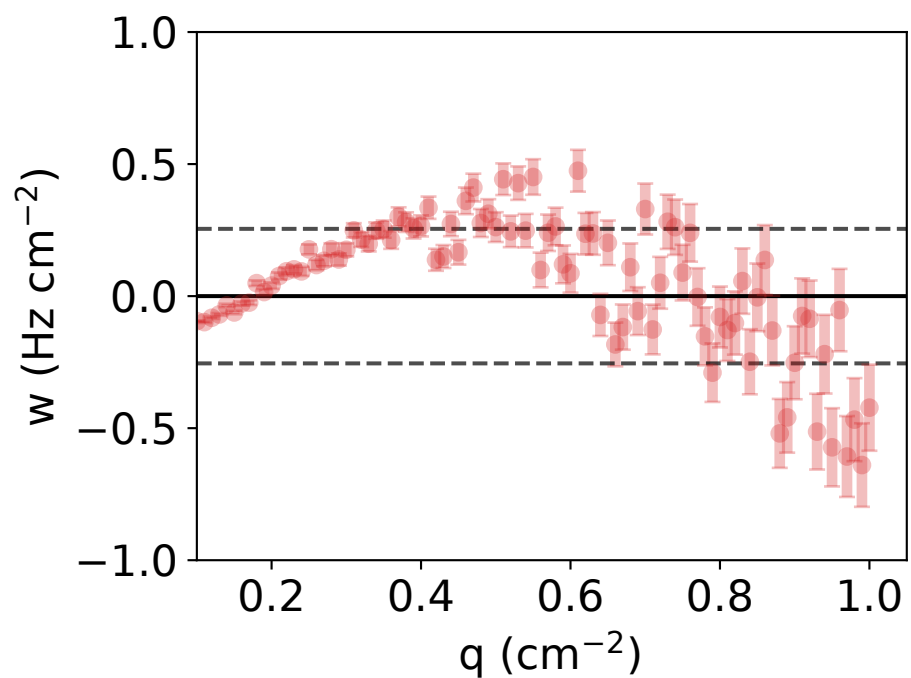
$\nu = 1.642 \pm 0.015$, $M = 16.746 \pm 0.617$ cm²($\nu - 1$)/s
 $RMSE_{particle\ vs\ full} = 0.251$ Hz/cm²



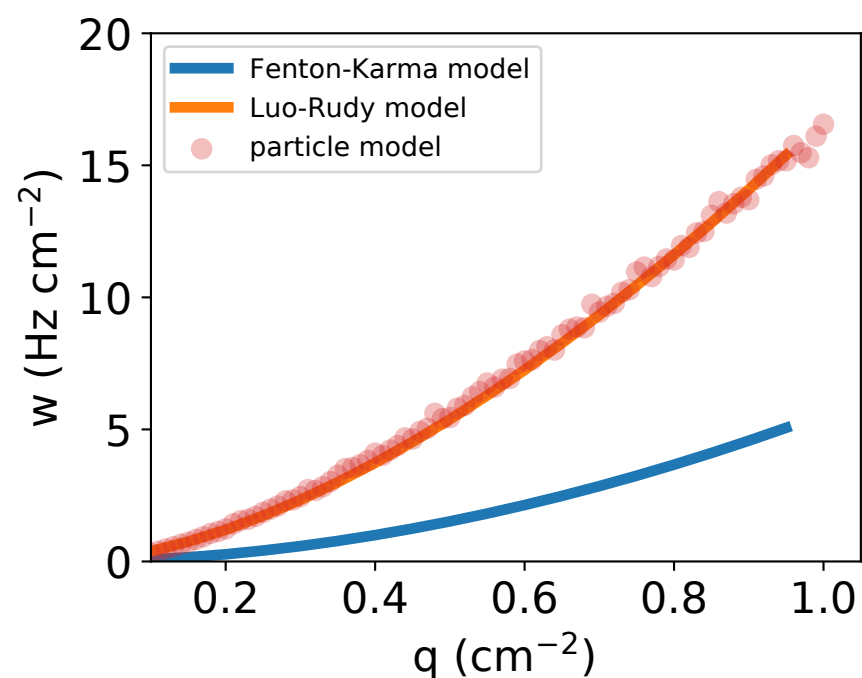
force_code=2, neighbors=0, reflect=0
 $r = 0.11198$ cm, $\kappa = 489.44700$ Hz
 $D = 0.48417$ cm²/s, $a = 8.76820$ cm²/s, $x_0 = 0$ cm



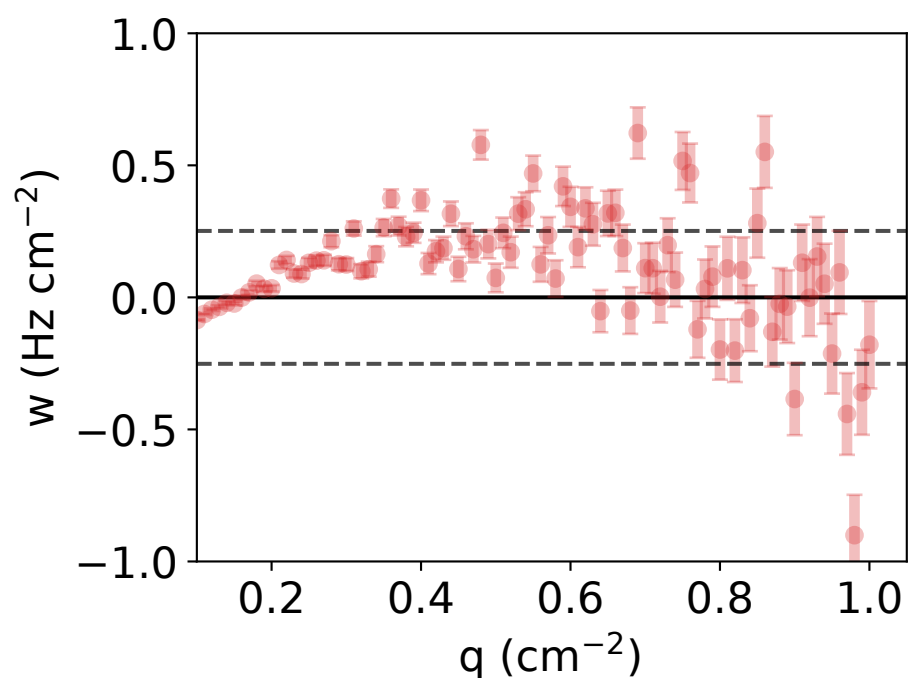
$\nu = 1.654 \pm 0.022$, $M = 16.099 \pm 0.874$ cm²($\nu - 1$)/s
 $RMSE_{particle\ vs\ full} = 0.255$ Hz/cm²



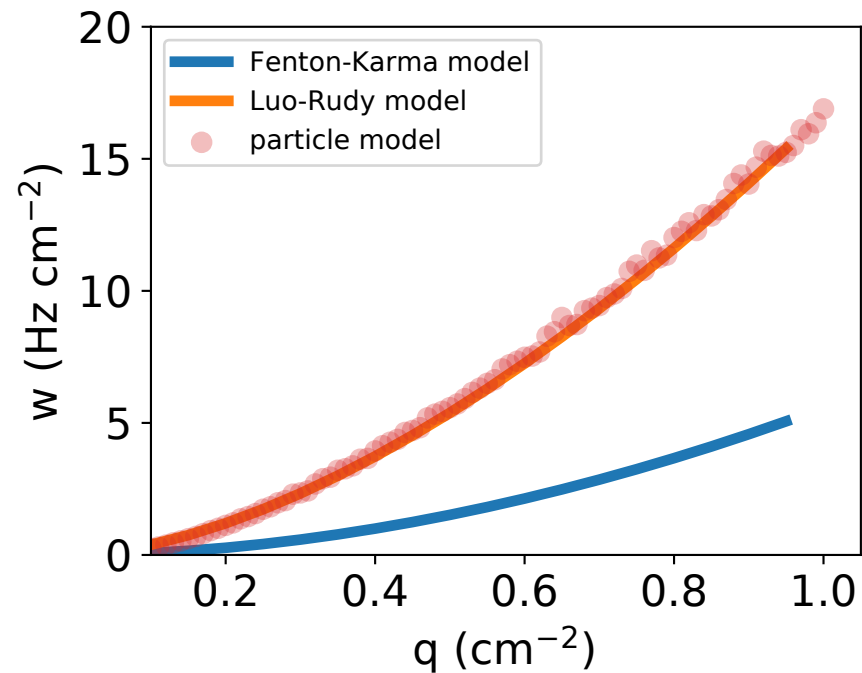
force_code=2, neighbors=0, reflect=0
 $r = 0.15873$ cm, $\kappa = 301.21900$ Hz
 $D = 0.79756$ cm²/s, $a = 9.80803$ cm²/s, $x_0 = 0$ cm



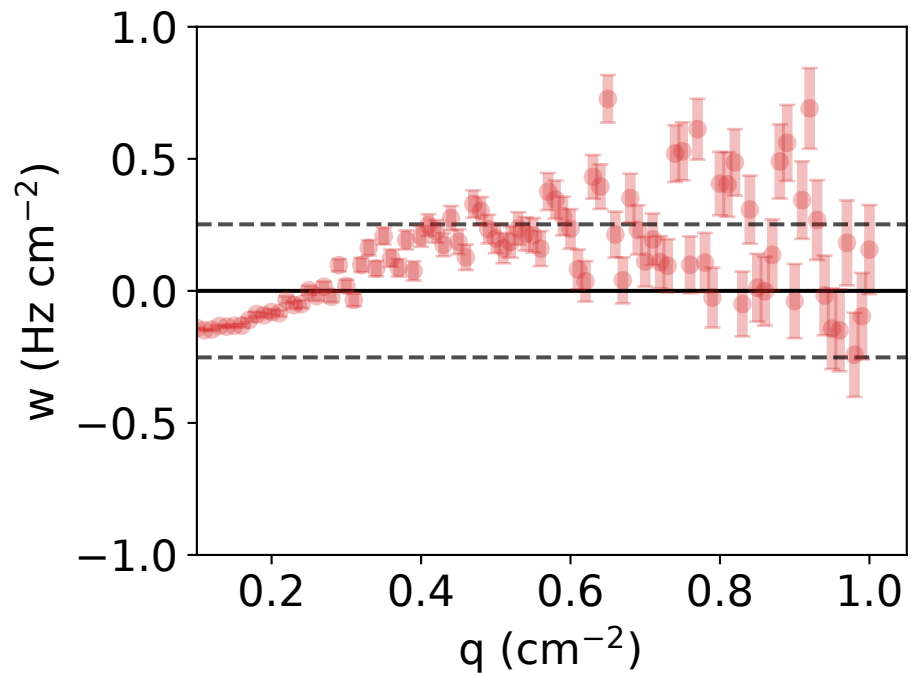
$\nu = 1.644 \pm 0.018$, $M = 16.402 \pm 0.751$ cm²($\nu - 1$)/s
 $RMSE_{particle\ vs\ full} = 0.252$ Hz/cm²



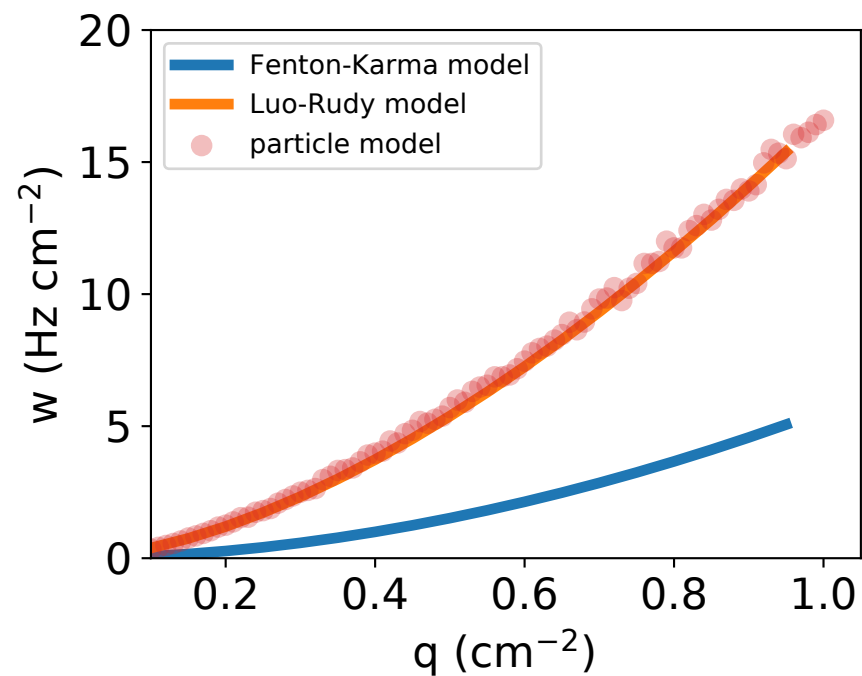
force_code=2, neighbors=0, reflect=0
 $r = 0.09561$ cm, $\kappa = 712.15900$ Hz
 $D = 0.34696$ cm²/s, $a = 7.06417$ cm²/s, $x_0 = 0$ cm



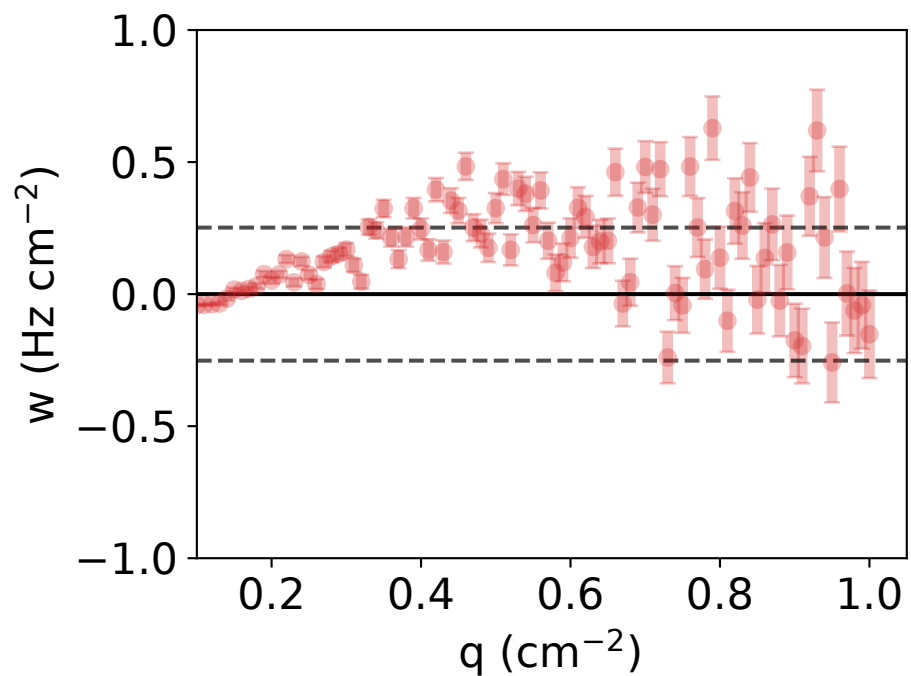
$\nu = 1.746 \pm 0.024$, $M = 16.727 \pm 0.985$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.252 Hz/cm²



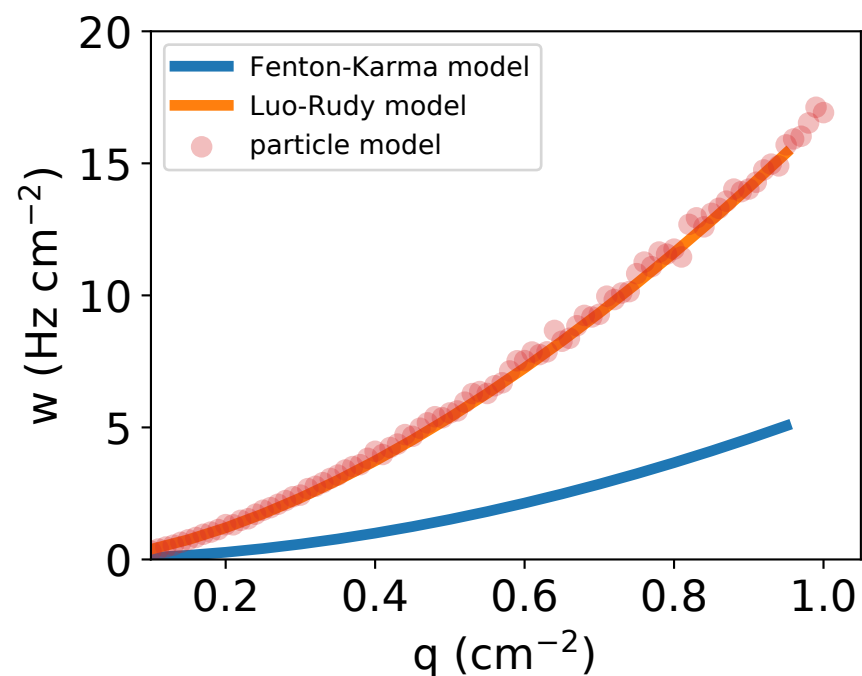
force_code=2, neighbors=0, reflect=0
 $r = 0.12304$ cm, $\kappa = 400.00000$ Hz
 $D = 0.00000$ cm²/s, $a = 17.04280$ cm²/s, $x_0 = 0$ cm



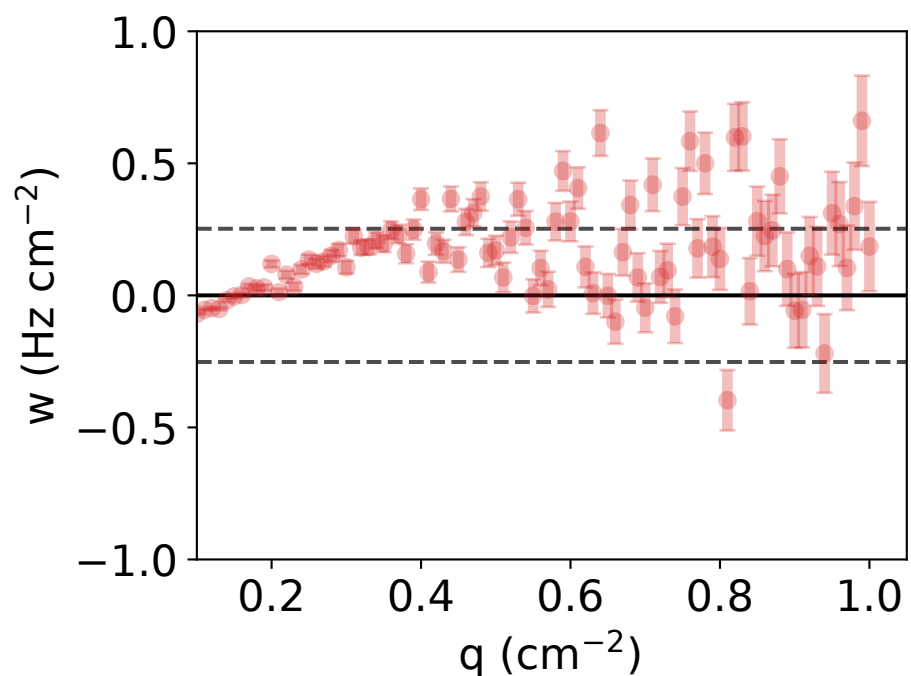
$\nu = 1.641 \pm 0.013$, $M = 16.675 \pm 0.596$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.252 Hz/cm²



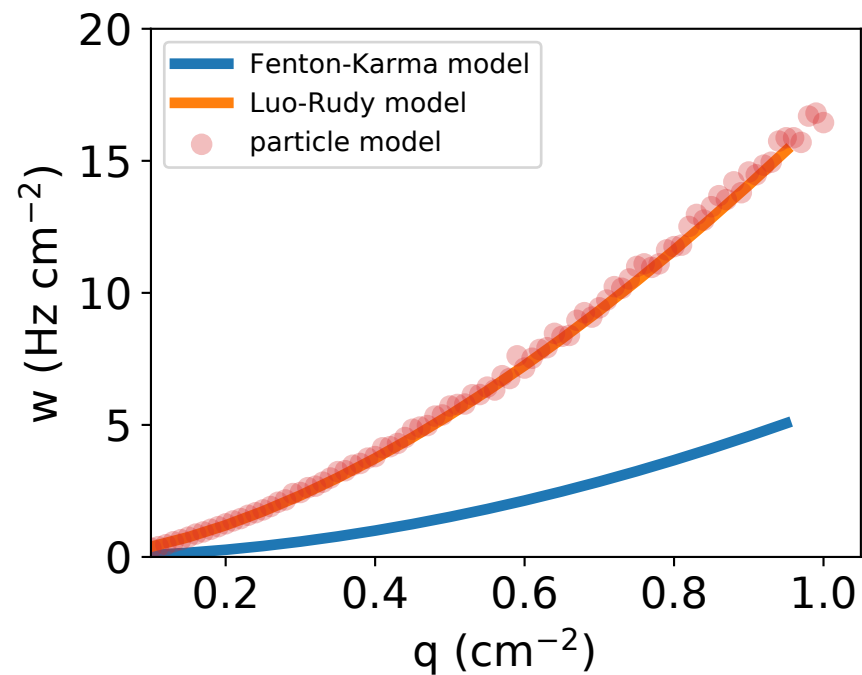
force_code=2, neighbors=0, reflect=0
 $r = 0.17848$ cm, $\kappa = 254.24400$ Hz
 $D = 0.74059$ cm²/s, $a = 10.14480$ cm²/s, $x_0 = 0$ cm



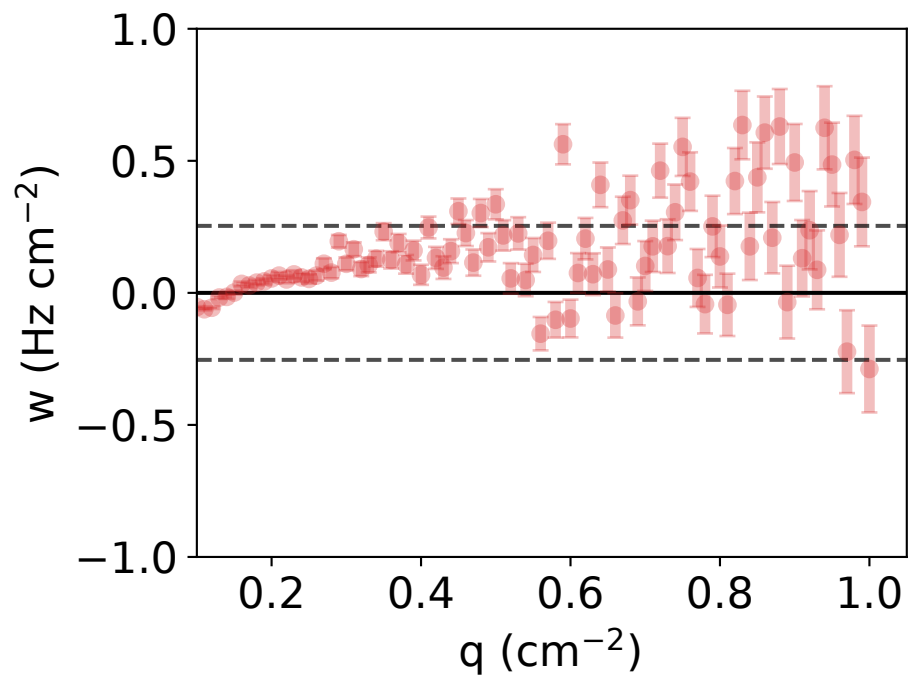
$\nu = 1.652 \pm 0.015$, $M = 16.765 \pm 0.651$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.252 Hz/cm²



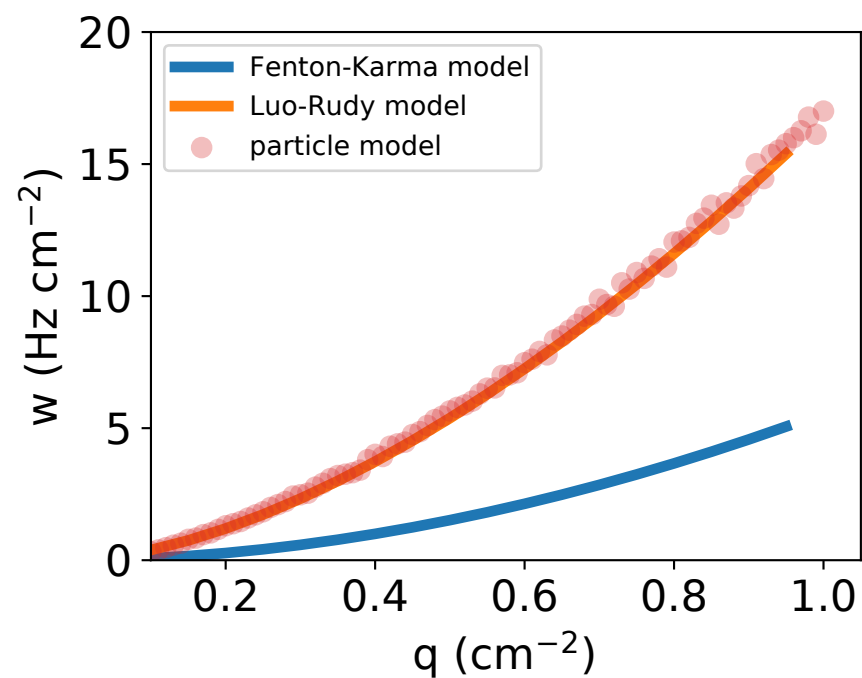
force_code=2, neighbors=0, reflect=0
 $r = 0.20509$ cm, $\kappa = 204.57800$ Hz
 $D = 0.39084$ cm²/s, $a = 10.85430$ cm²/s, $x_0 = 0$ cm



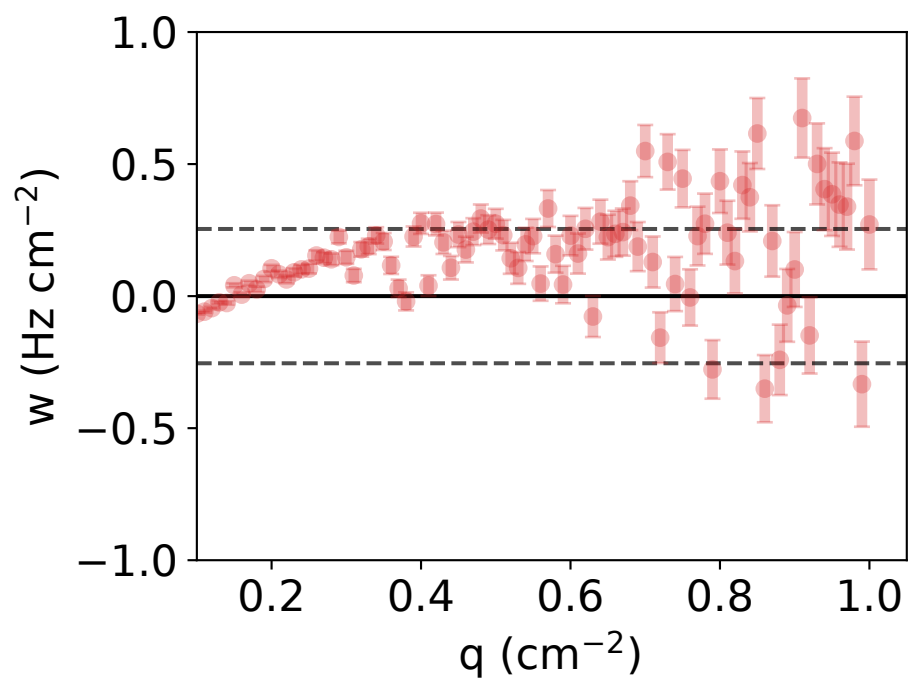
$\nu = 1.653 \pm 0.013$, $M = 16.903 \pm 0.560$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.254 Hz/cm²



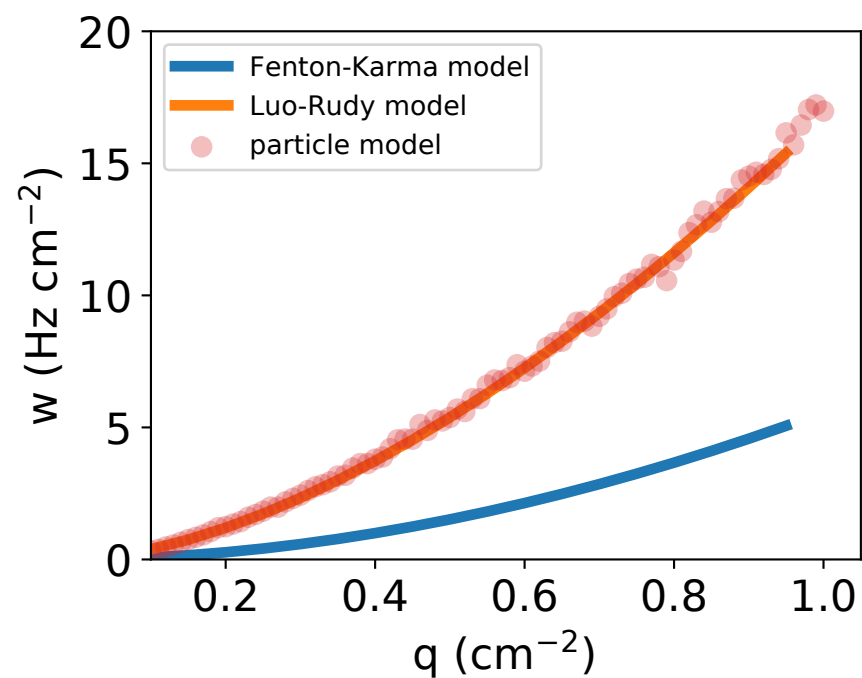
force_code=2, neighbors=0, reflect=0
 $r = 0.18848$ cm, $\kappa = 235.13600$ Hz
 $D = 0.54054$ cm²/s, $a = 10.41500$ cm²/s, $x_0 = 0$ cm



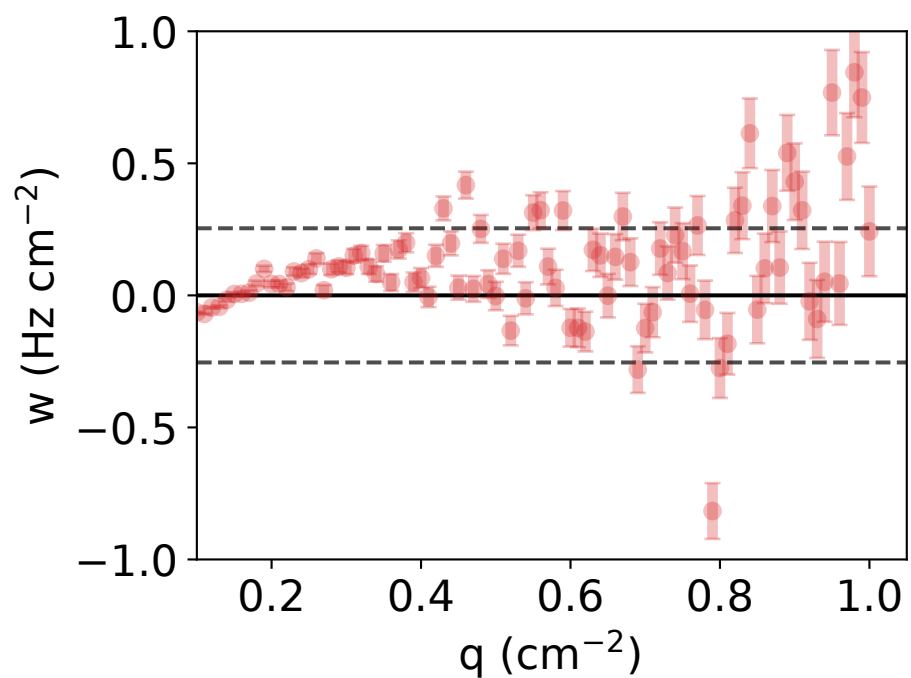
$\nu = 1.647 \pm 0.014$, $M = 16.817 \pm 0.618$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.254 Hz/cm²



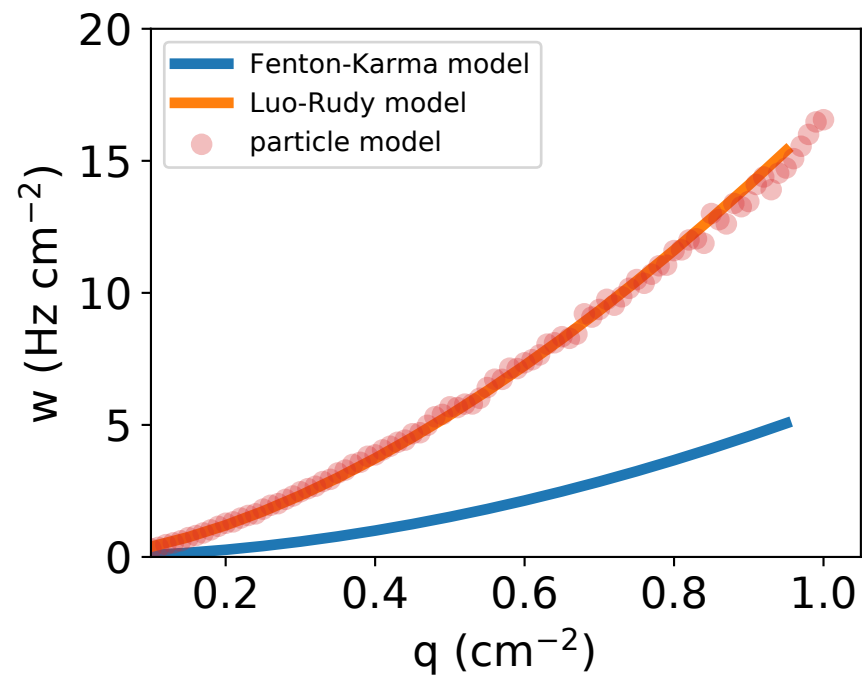
force_code=2, neighbors=0, reflect=0
 $r = 0.20732$ cm, $\kappa = 200.00000$ Hz
 $D = 0.49456$ cm²/s, $a = 10.63500$ cm²/s, $x_0 = 0$ cm



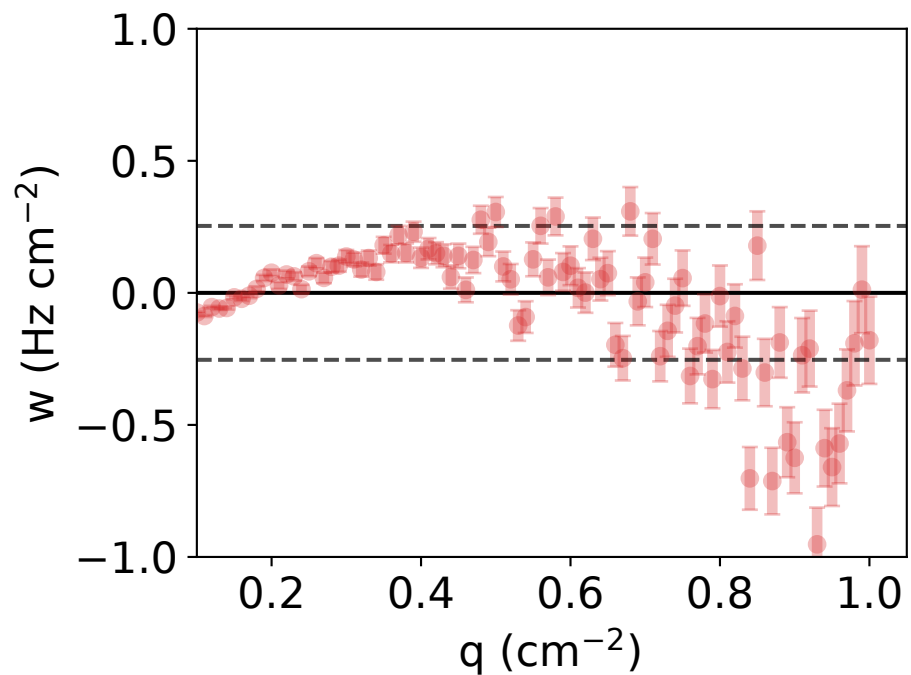
$\nu = 1.652 \pm 0.014$, $M = 16.845 \pm 0.644$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.254 Hz/cm²



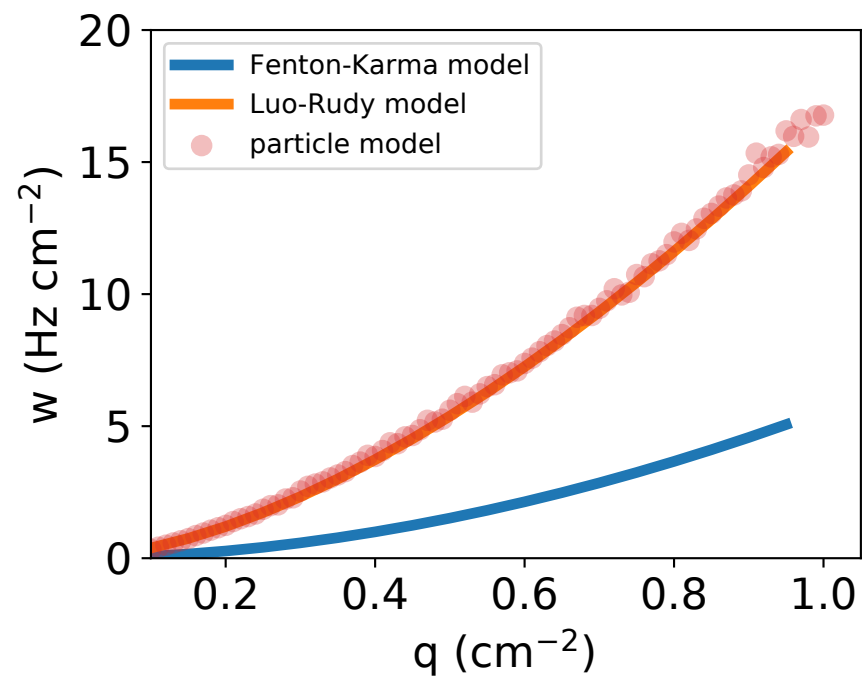
force_code=2, neighbors=0, reflect=0
 $r = 0.15627$ cm, $\kappa = 300.00000$ Hz
 $D = 0.20754$ cm²/s, $a = 9.77808$ cm²/s, $x_0 = 0$ cm



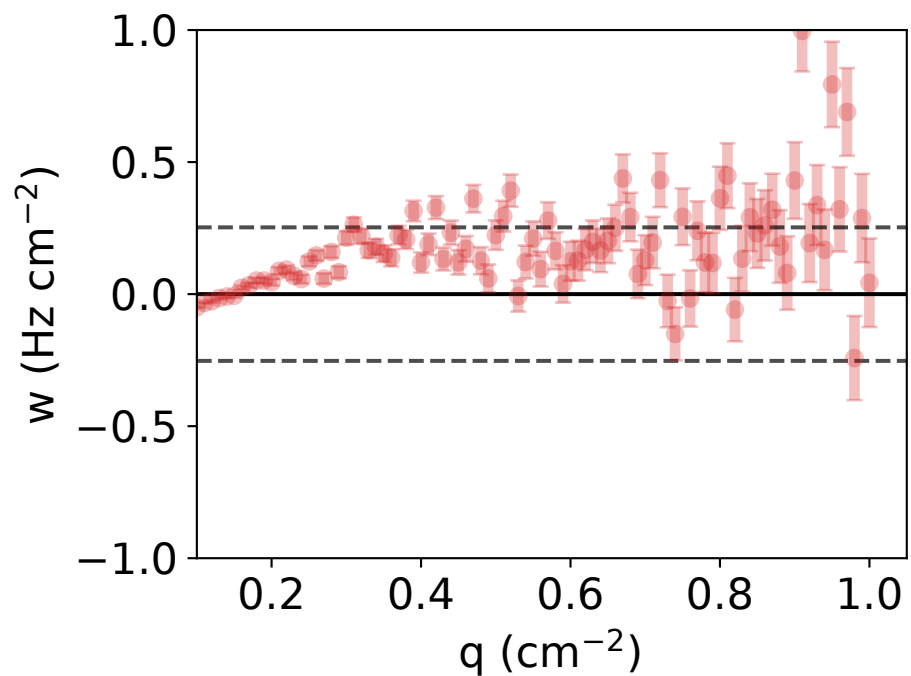
$\nu = 1.645 \pm 0.017$, $M = 16.082 \pm 0.692$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.253 Hz/cm²



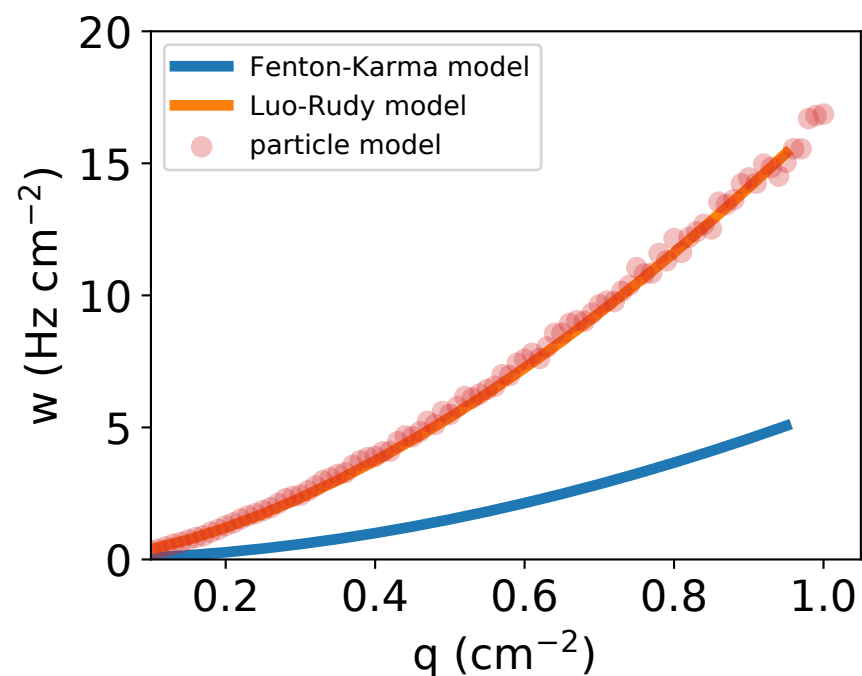
force_code=2, neighbors=0, reflect=0
 $r = 0.20686$ cm, $\kappa = 200.00000$ Hz
 $D = 0.46441$ cm²/s, $a = 11.10740$ cm²/s, $x_0 = 0$ cm



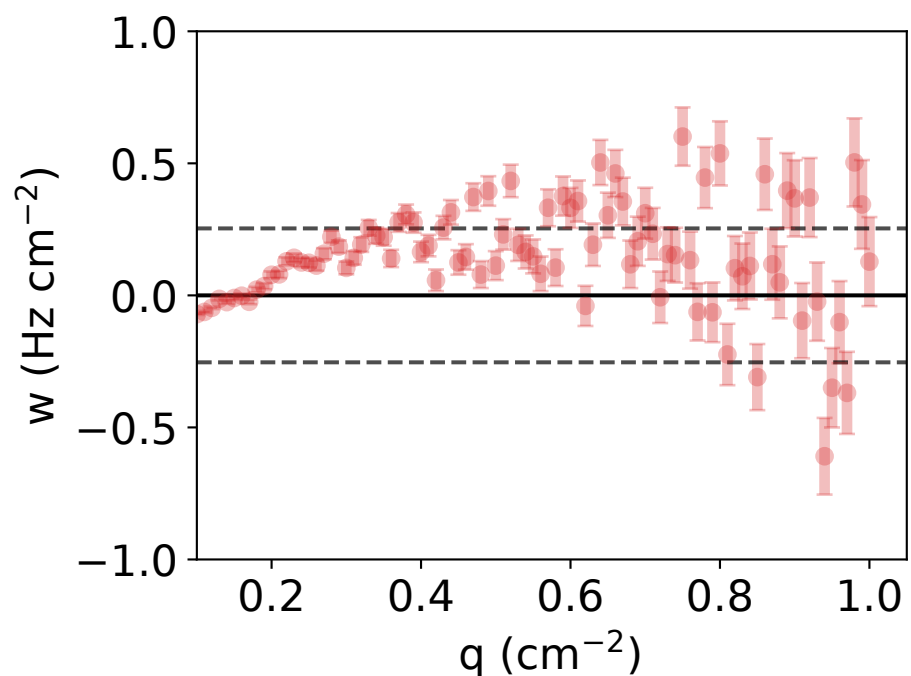
$\nu = 1.642 \pm 0.012$, $M = 16.888 \pm 0.518$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.253 Hz/cm²



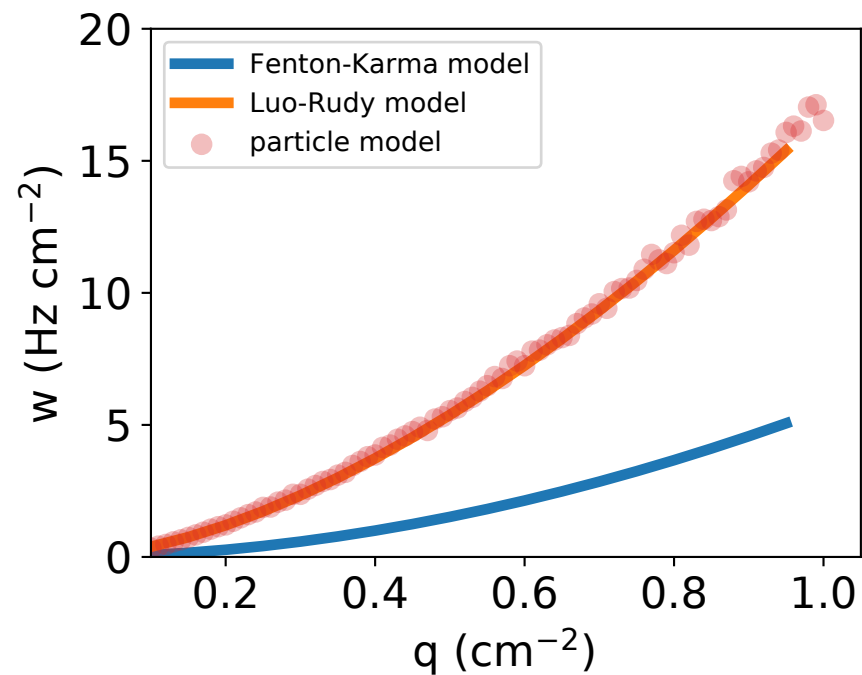
force_code=2, neighbors=0, reflect=0
 $r = 0.15986$ cm, $\kappa = 300.00000$ Hz
 $D = 0.60162$ cm²/s, $a = 9.90969$ cm²/s, $x_0 = 0$ cm



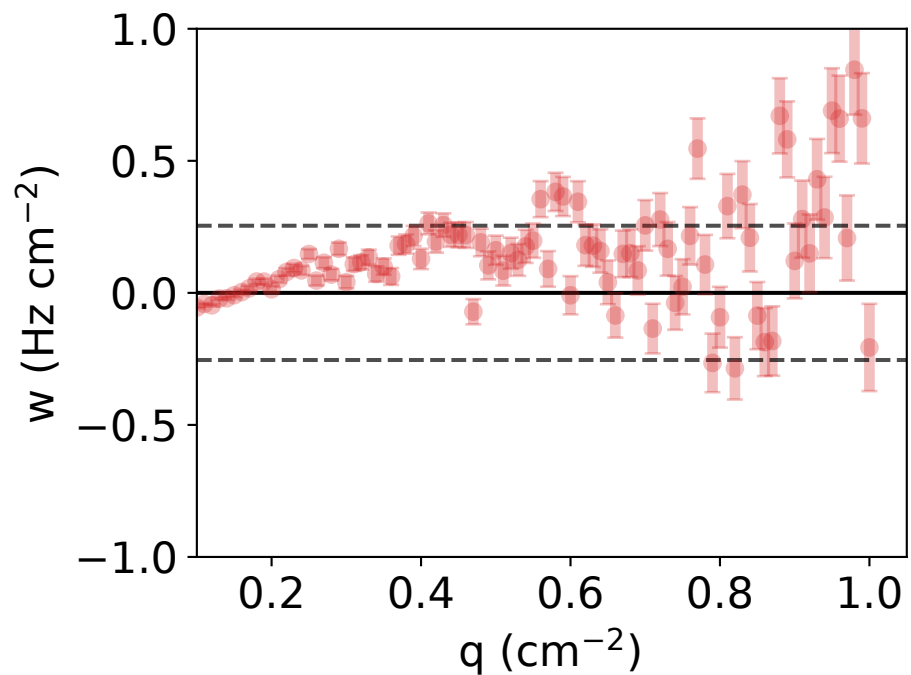
$\nu = 1.646 \pm 0.016$, $M = 16.608 \pm 0.689$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.254 Hz/cm²



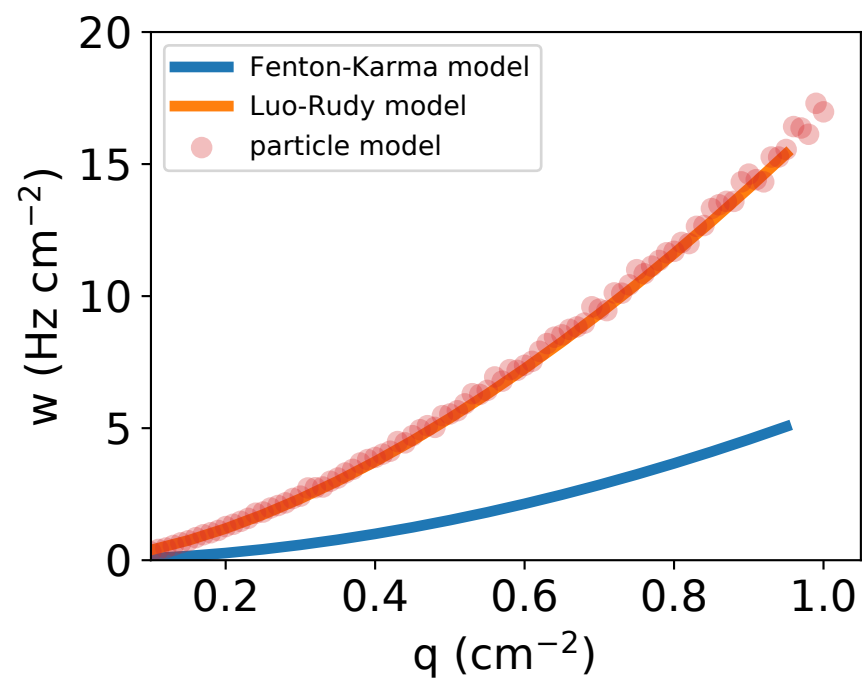
force_code=2, neighbors=0, reflect=0
 $r = 0.20715$ cm, $\kappa = 200.00000$ Hz
 $D = 0.39281$ cm²/s, $a = 10.90380$ cm²/s, $x_0 = 0$ cm



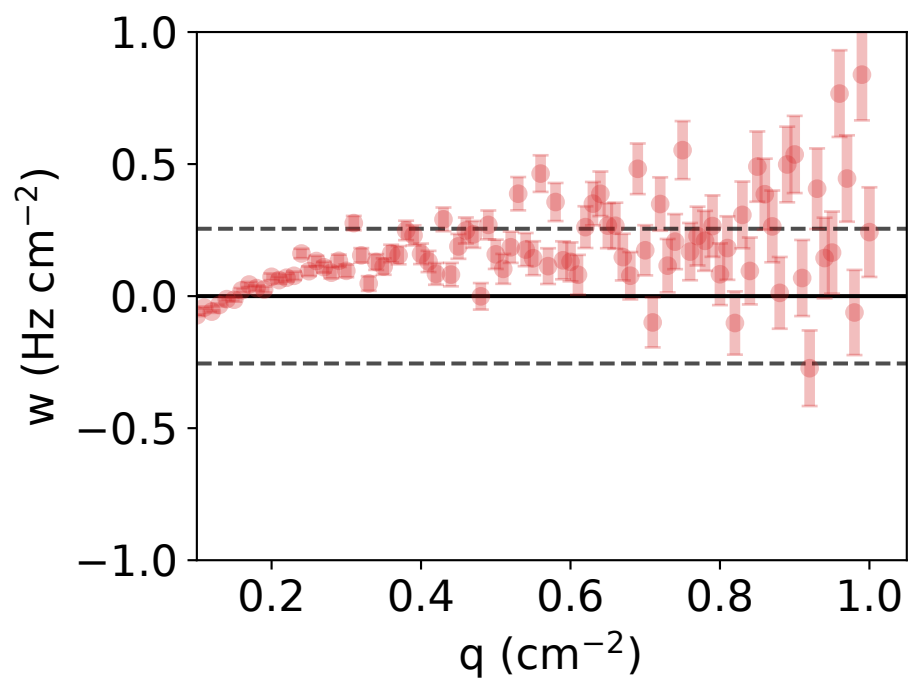
$\nu = 1.651 \pm 0.012$, $M = 16.886 \pm 0.544$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.254 Hz/cm²



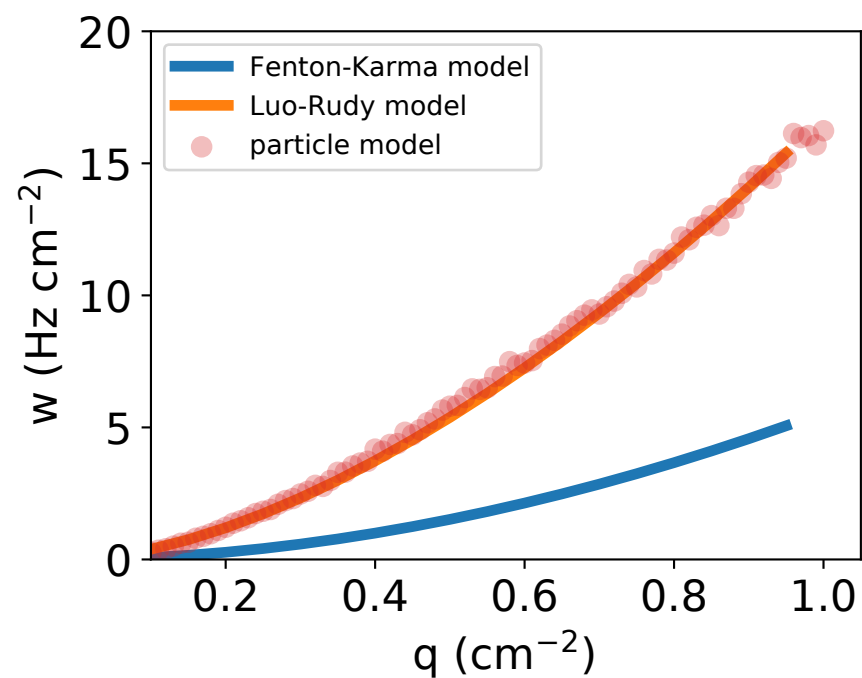
force_code=2, neighbors=0, reflect=0
 $r = 0.19275$ cm, $\kappa = 227.22000$ Hz
 $D = 0.55444$ cm²/s, $a = 10.40260$ cm²/s, $x_0 = 0$ cm



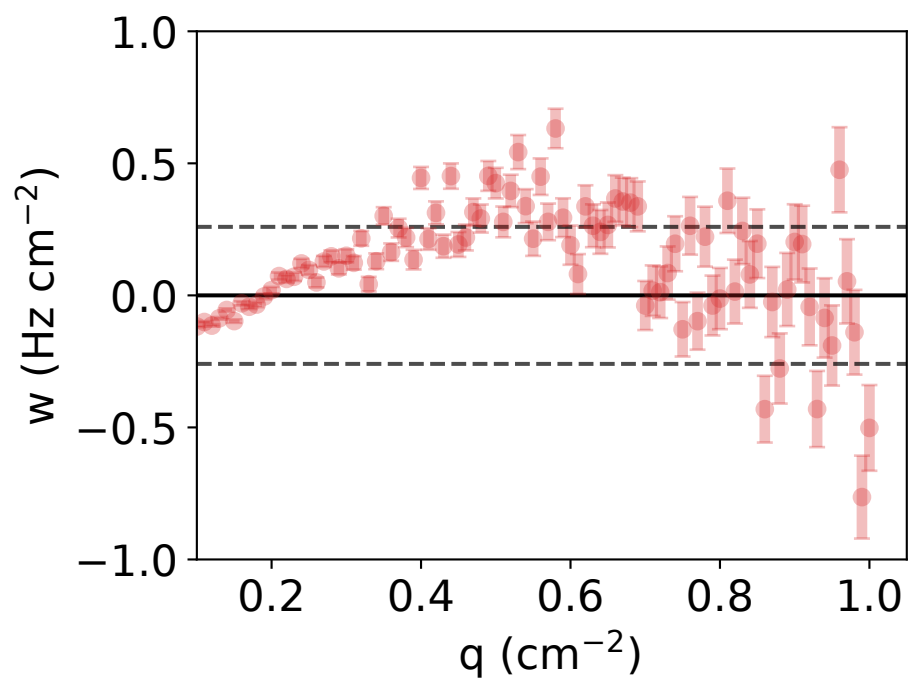
$\nu = 1.654 \pm 0.014$, $M = 16.895 \pm 0.578$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.255 Hz/cm²



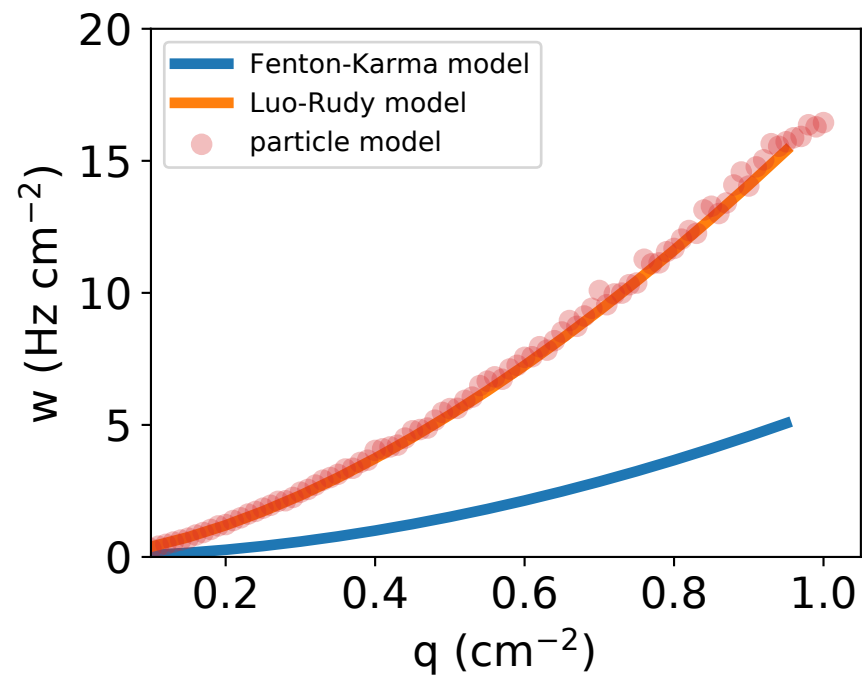
force_code=2, neighbors=0, reflect=0
 $r = 0.09964$ cm, $\kappa = 616.70500$ Hz
 $D = 0.44447$ cm²/s, $a = 7.84928$ cm²/s, $x_0 = 0$ cm



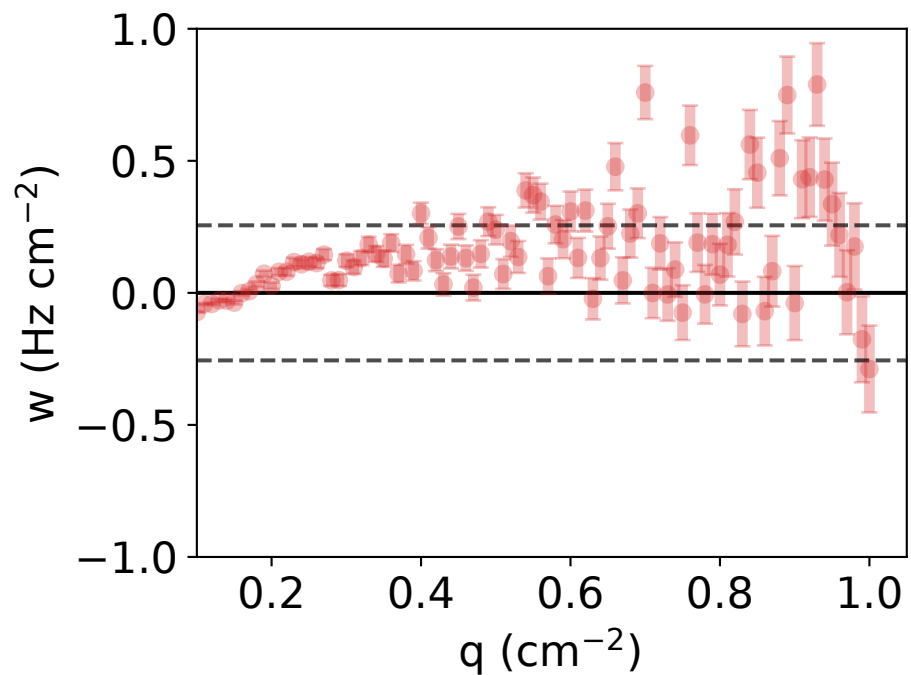
$\nu = 1.683 \pm 0.023$, $M = 16.362 \pm 0.954$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.259 Hz/cm²



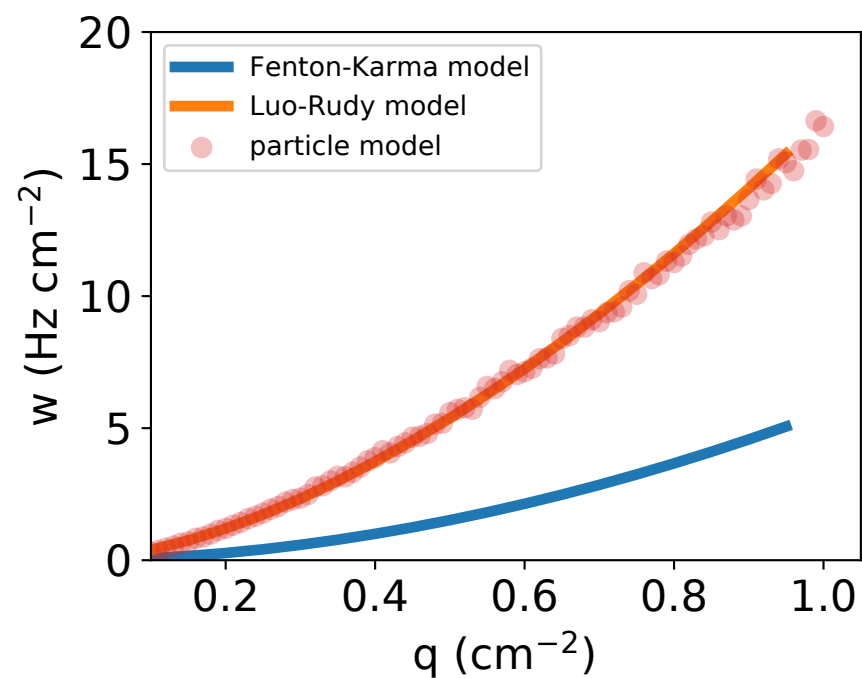
force_code=2, neighbors=0, reflect=0
 $r = 0.20476$ cm, $\kappa = 204.23200$ Hz
 $D = 0.42539$ cm²/s, $a = 10.82820$ cm²/s, $x_0 = 0$ cm



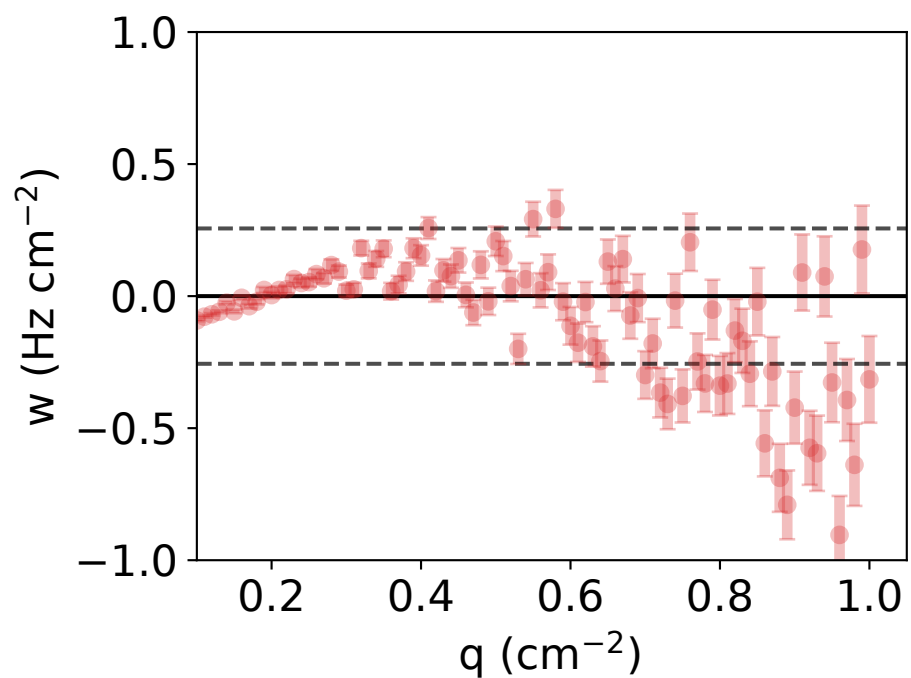
$\nu = 1.655 \pm 0.013$, $M = 16.853 \pm 0.588$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.256 Hz/cm²



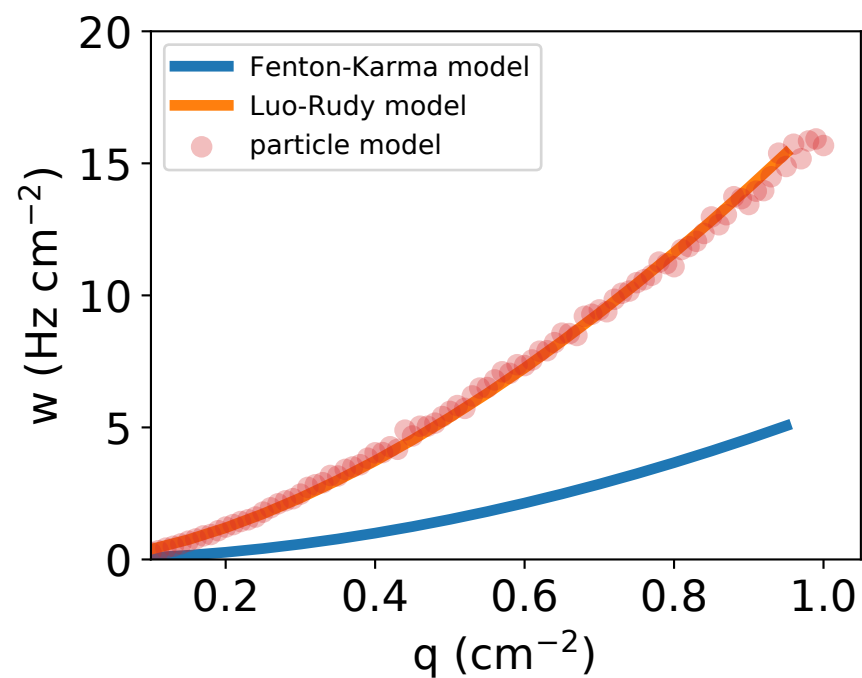
force_code=2, neighbors=0, reflect=0
 $r = 0.15712$ cm, $\kappa = 300.00000$ Hz
 $D = 0.27997$ cm²/s, $a = 9.49405$ cm²/s, $x_0 = 0$ cm



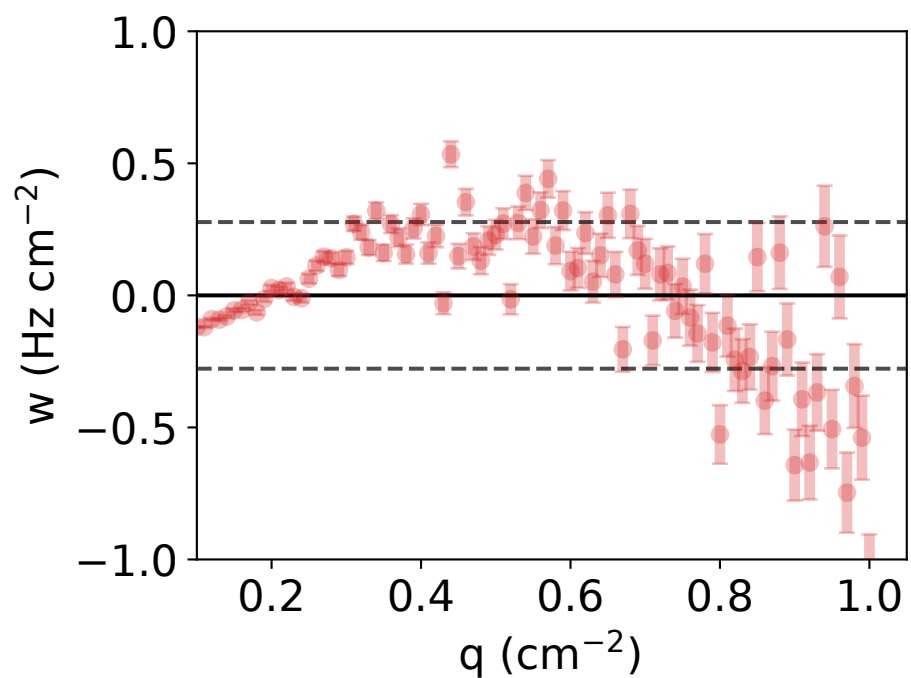
$\nu = 1.652 \pm 0.017$, $M = 16.092 \pm 0.685$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.256 Hz/cm²



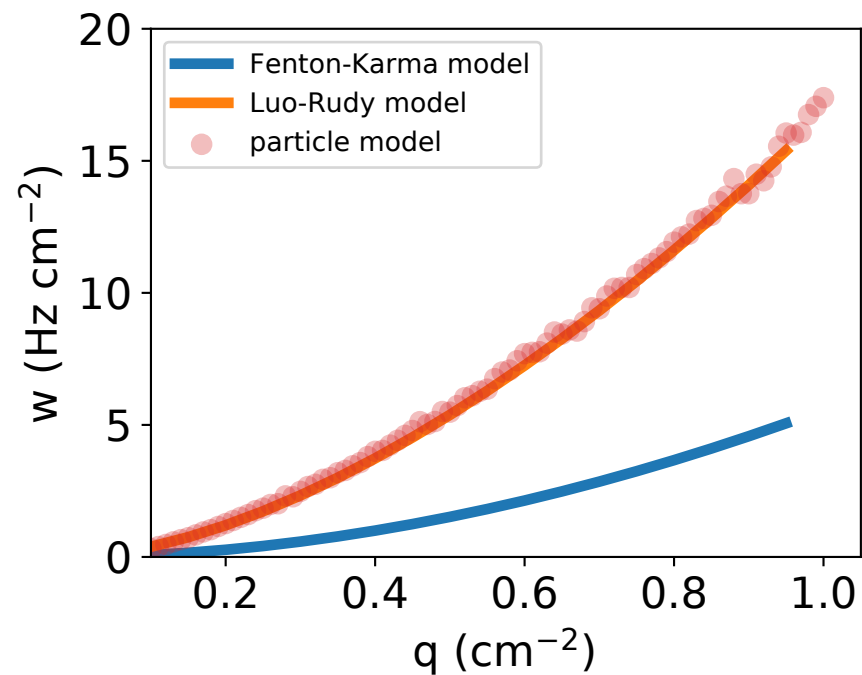
force_code=2, neighbors=0, reflect=0
 $r = 0.09022$ cm, $\kappa = 650.44100$ Hz
 $D = 0.55044$ cm²/s, $a = 7.99907$ cm²/s, $x_0 = 0$ cm



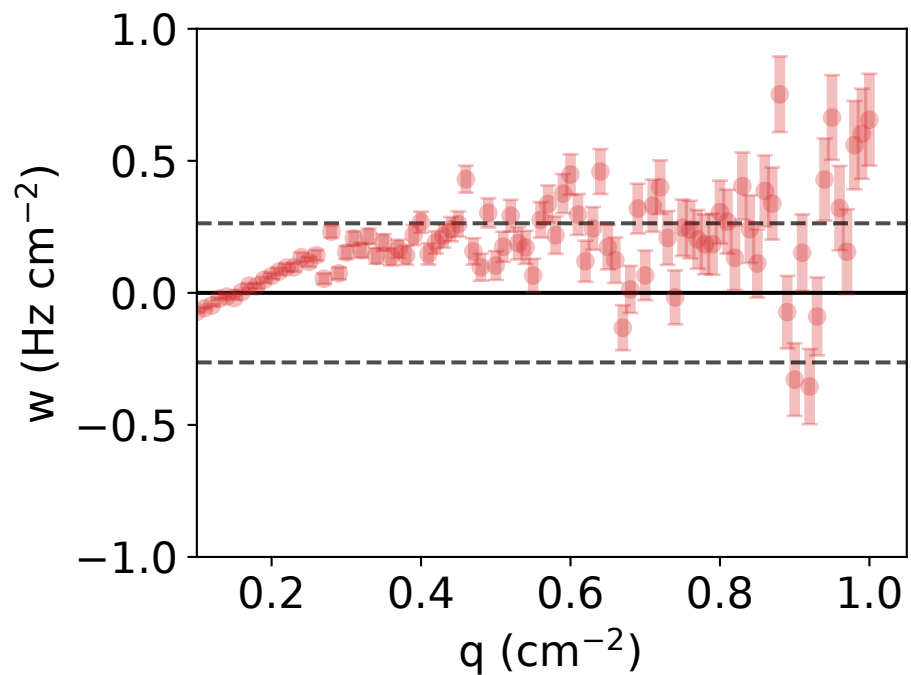
$\nu = 1.676 \pm 0.024$, $M = 16.038 \pm 0.973$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.278 Hz/cm²



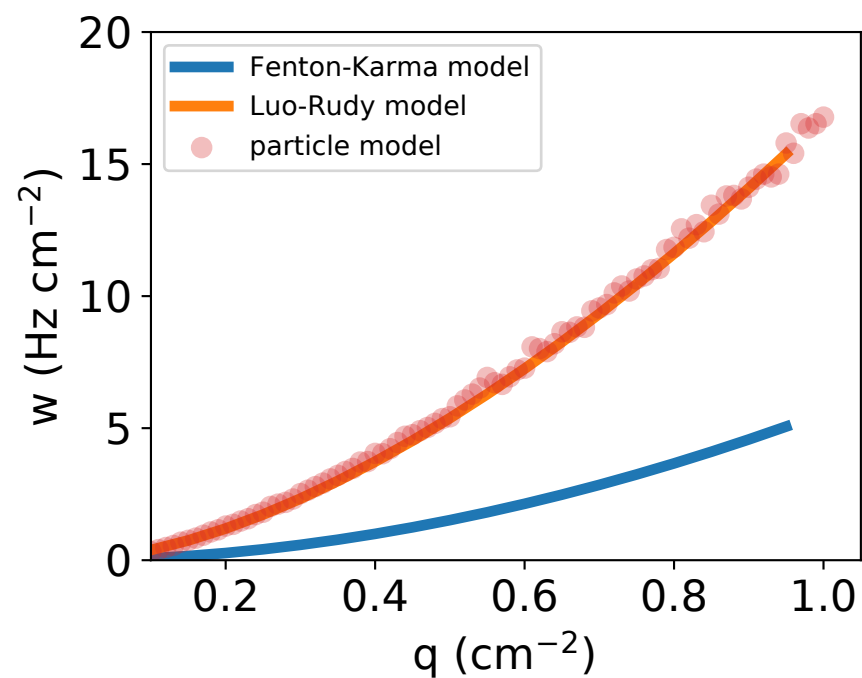
force_code=2, neighbors=0, reflect=0
 $r = 0.19163$ cm, $\kappa = 226.13500$ Hz
 $D = 0.48638$ cm²/s, $a = 10.72370$ cm²/s, $x_0 = 0$ cm



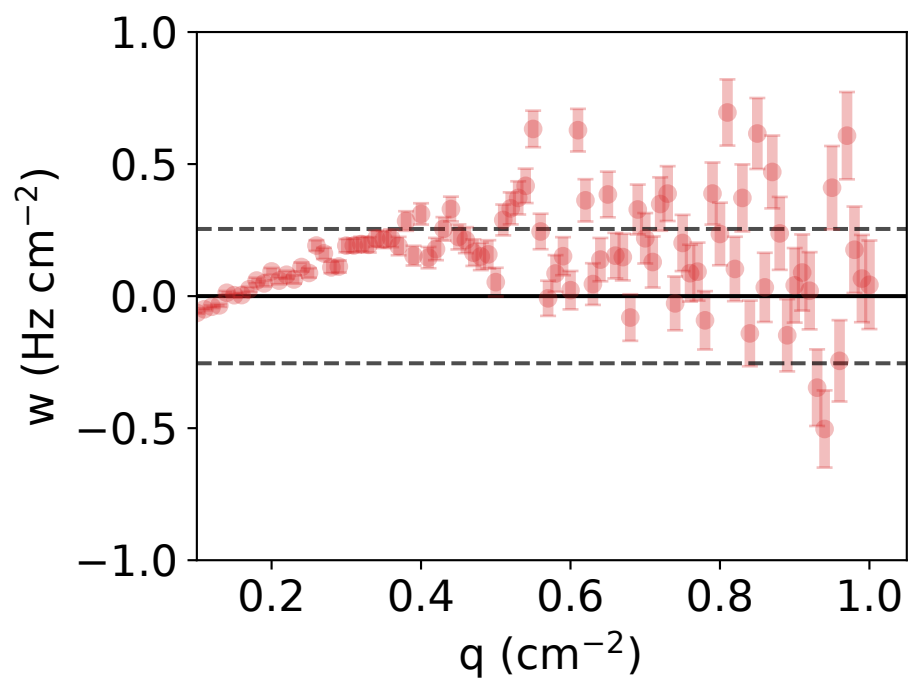
$\nu = 1.652 \pm 0.014$, $M = 16.854 \pm 0.610$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.263 Hz/cm²



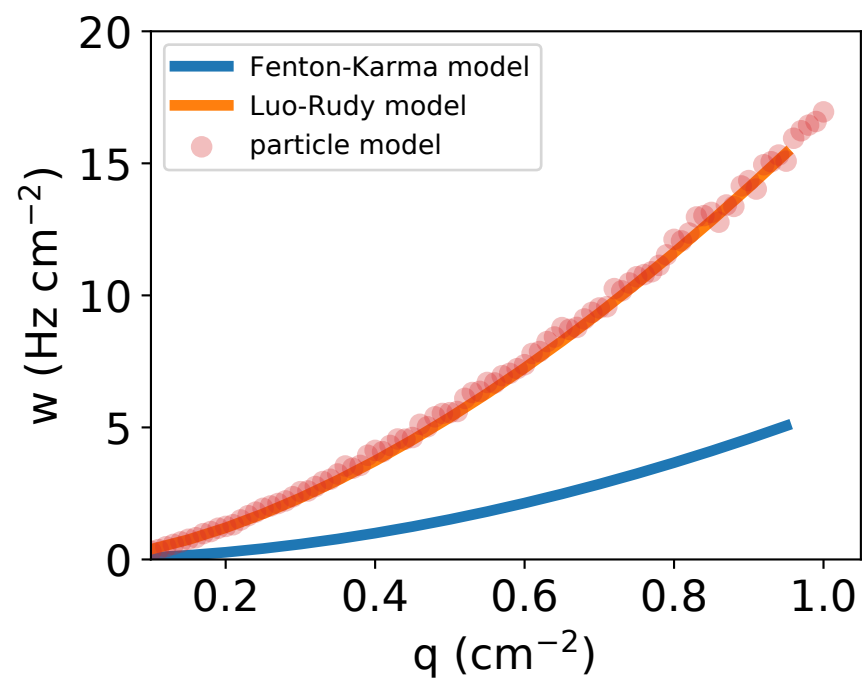
force_code=2, neighbors=0, reflect=0
 $r = 0.17954$ cm, $\kappa = 250.00000$ Hz
 $D = 0.46213$ cm²/s, $a = 10.48890$ cm²/s, $x_0 = 0$ cm



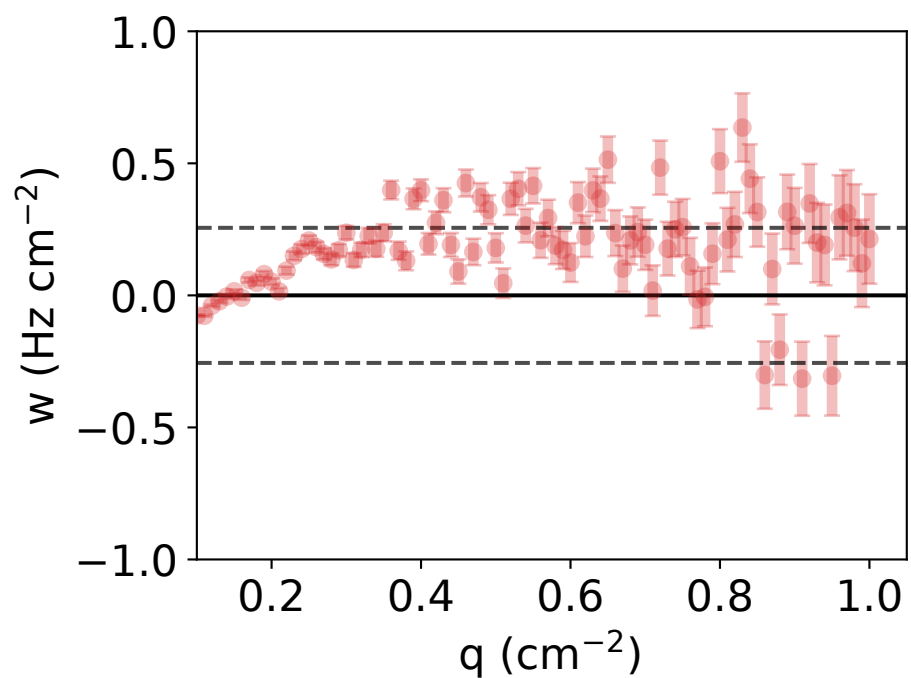
$\nu = 1.642 \pm 0.015$, $M = 16.668 \pm 0.637$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.254 Hz/cm²



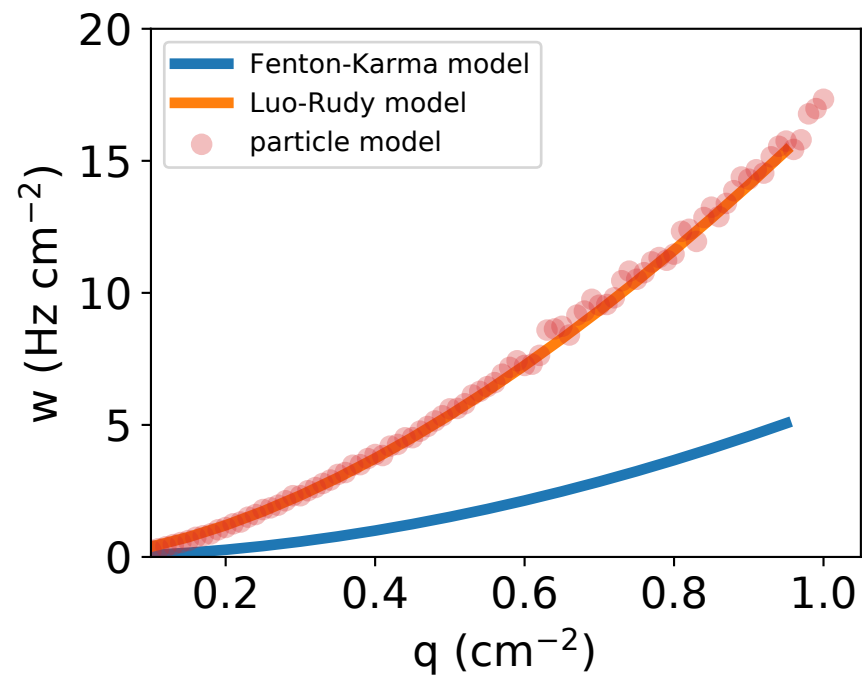
force_code=2, neighbors=0, reflect=0
 $r = 0.15983$ cm, $\kappa = 300.00000$ Hz
 $D = 0.64735$ cm²/s, $a = 9.89676$ cm²/s, $x_0 = 0$ cm



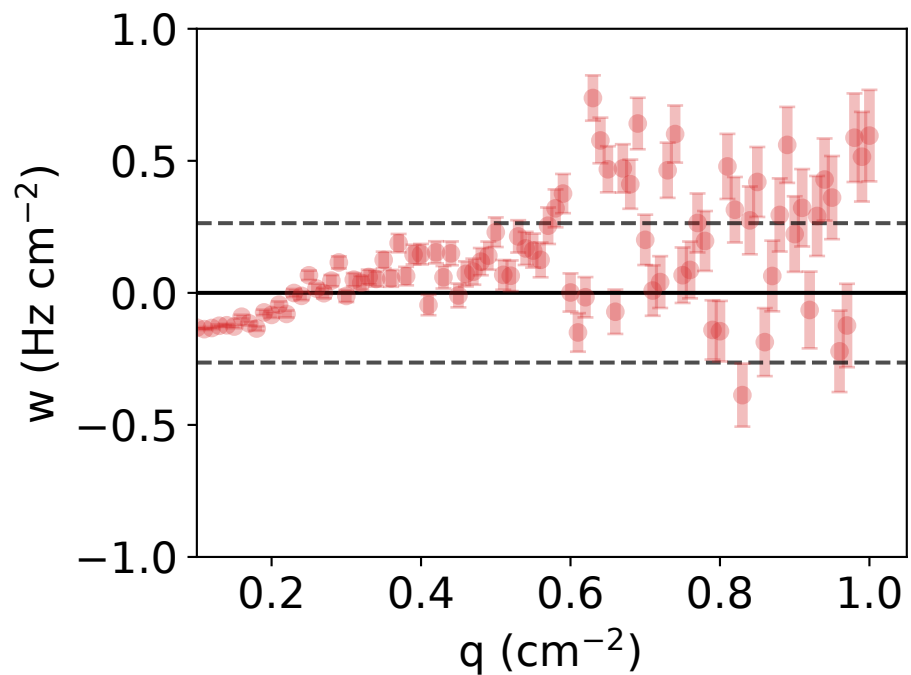
$\nu = 1.645 \pm 0.017$, $M = 16.683 \pm 0.704$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.256 Hz/cm²



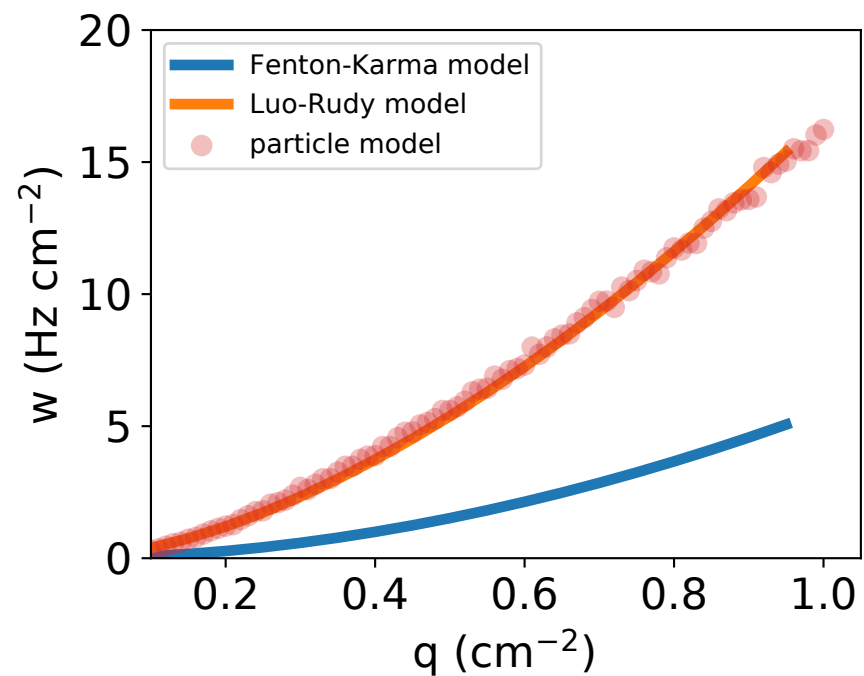
force_code=2, neighbors=0, reflect=0
 $r = 0.12970$ cm, $\kappa = 465.84400$ Hz
 $D = 0.32562$ cm²/s, $a = 7.46244$ cm²/s, $x_0 = 0$ cm



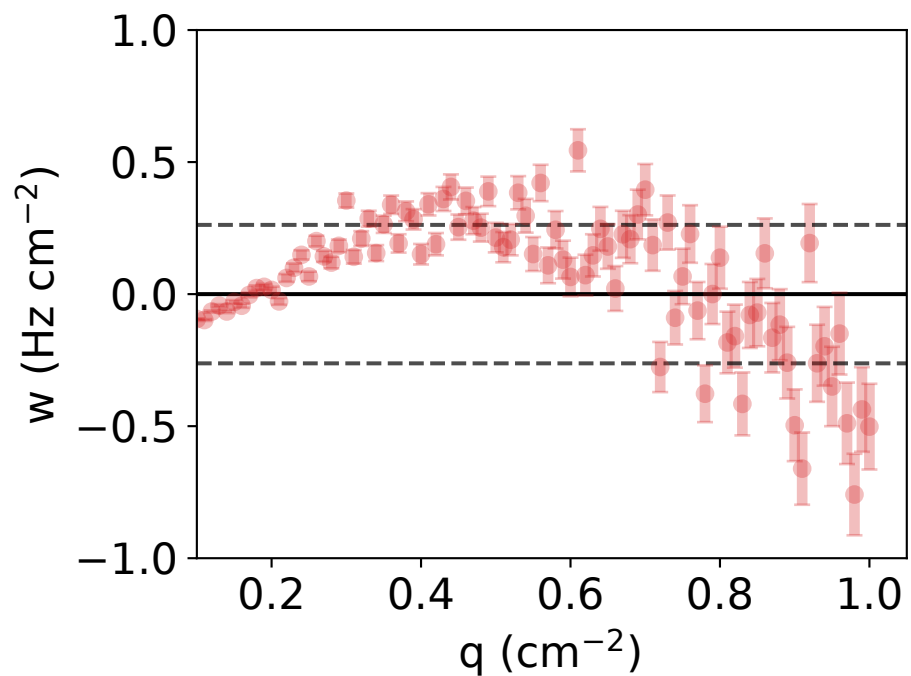
$\nu = 1.737 \pm 0.021$, $M = 16.855 \pm 0.893$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.264 Hz/cm²



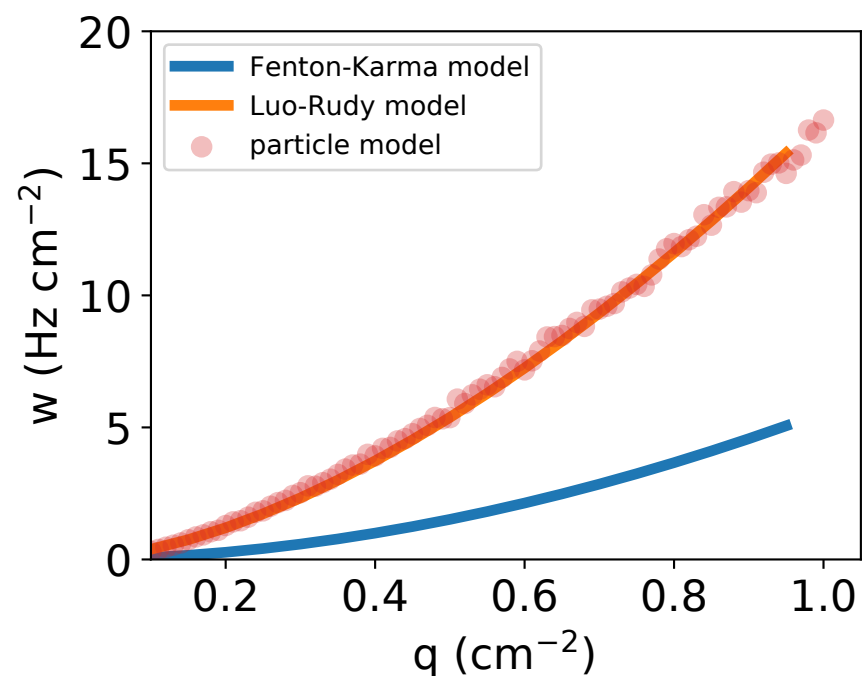
force_code=2, neighbors=0, reflect=0
 $r = 0.10179$ cm, $\kappa = 568.84600$ Hz
 $D = 0.14673$ cm²/s, $a = 8.79848$ cm²/s, $x_0 = 0$ cm



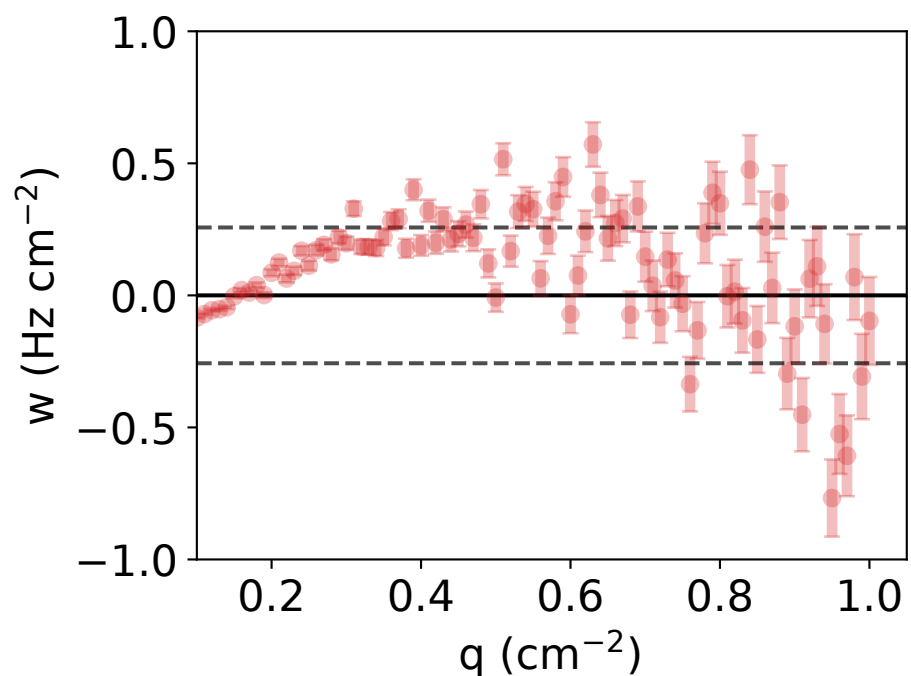
$\nu = 1.654 \pm 0.022$, $M = 16.120 \pm 0.876$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.262 Hz/cm²



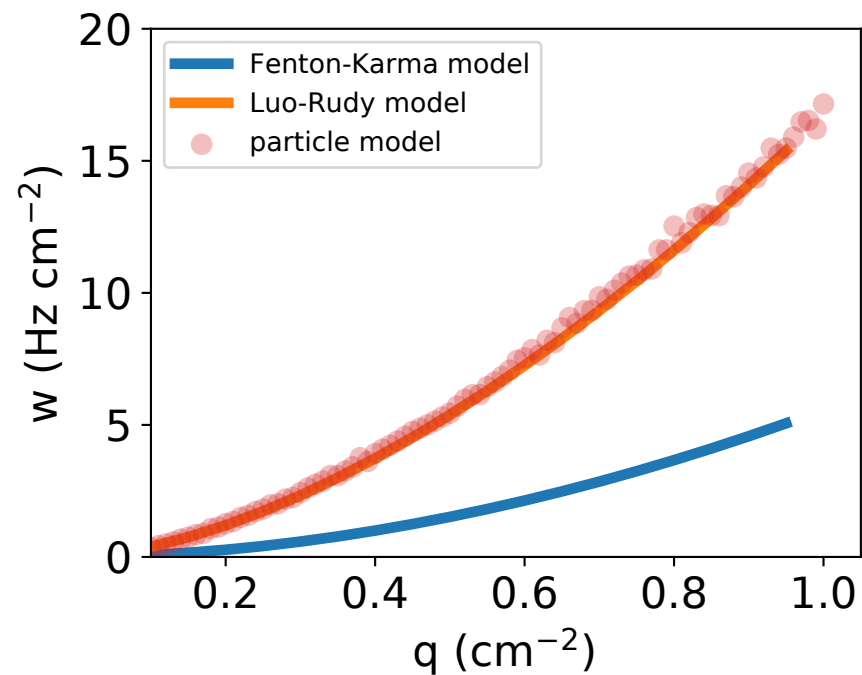
force_code=2, neighbors=0, reflect=0
 $r = 0.13125$ cm, $\kappa = 397.06200$ Hz
 $D = 0.29119$ cm²/s, $a = 9.35313$ cm²/s, $x_0 = 0$ cm



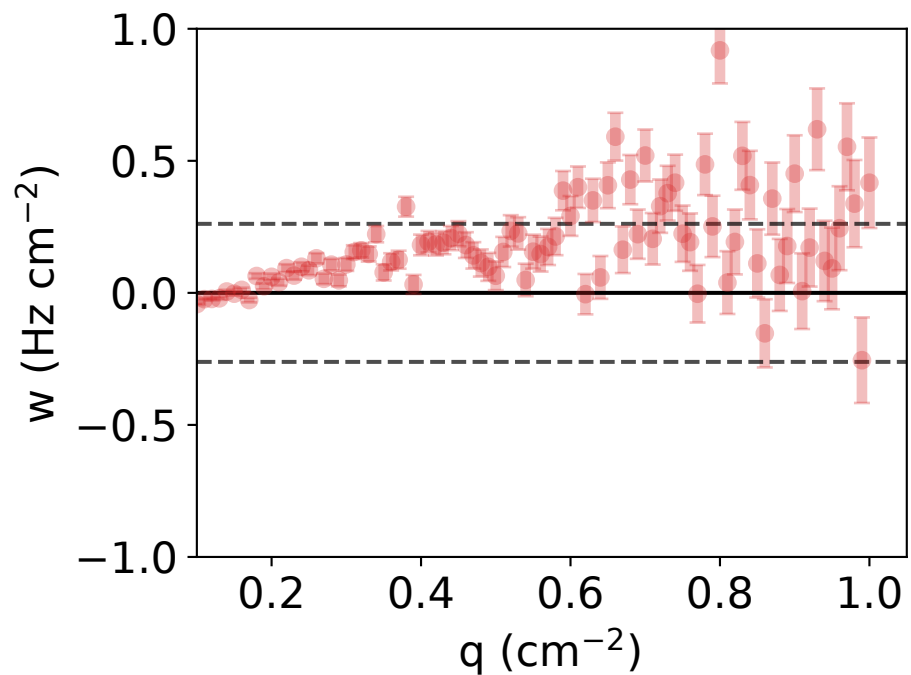
$\nu = 1.644 \pm 0.019$, $M = 16.325 \pm 0.799$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.257 Hz/cm²



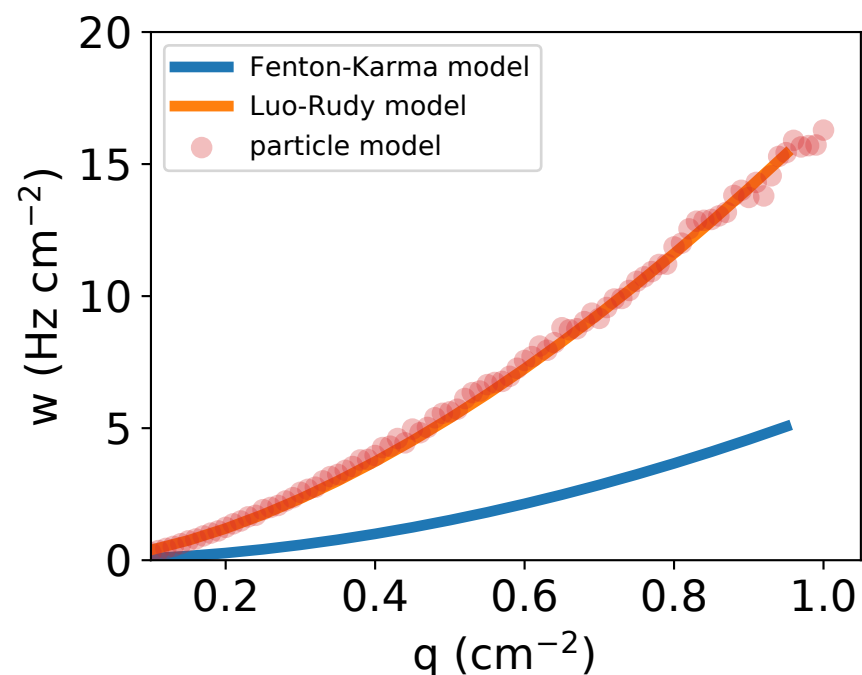
force_code=2, neighbors=0, reflect=0
 $r=0.18911$ cm, $\kappa=200.00000$ Hz
 $D=0.00000$ cm²/s, $a=21.62840$ cm²/s, $x_0=0$ cm



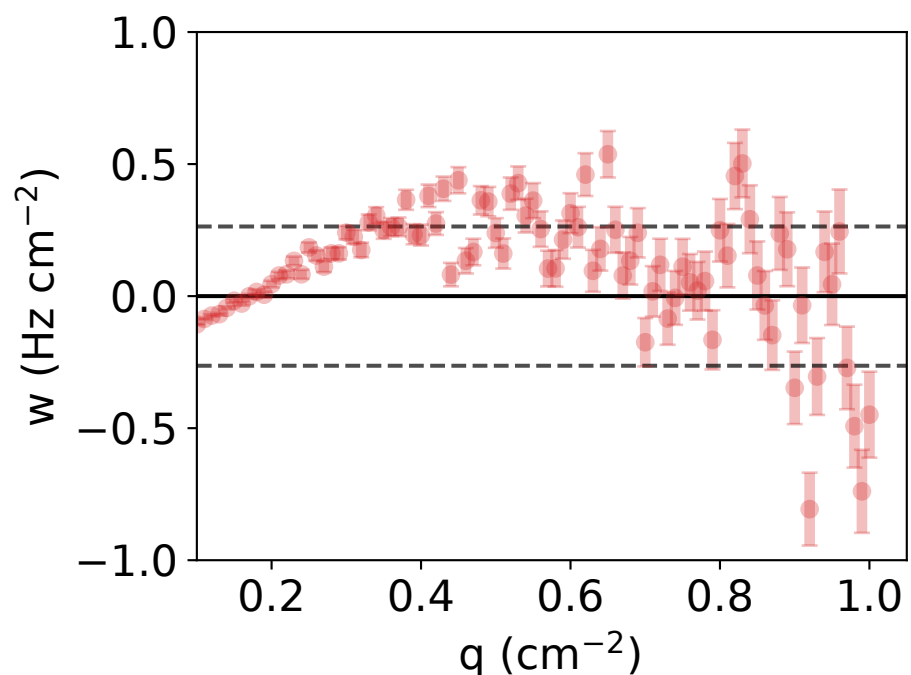
$\nu=1.647\pm0.010$, $M=16.944\pm0.467$ cm²($\nu-1$)/s
 $RMSE_{particle\ vs\ full}=0.261$ Hz/cm²



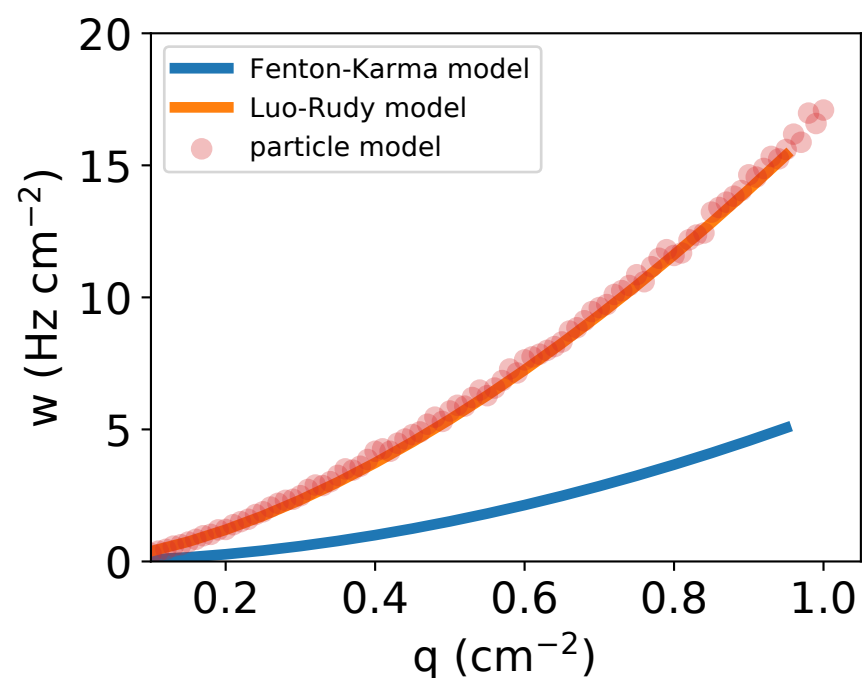
force_code=2, neighbors=0, reflect=0
 $r=0.11129$ cm, $\kappa=489.27700$ Hz
 $D=0.41716$ cm²/s, $a=8.90437$ cm²/s, $x_0=0$ cm



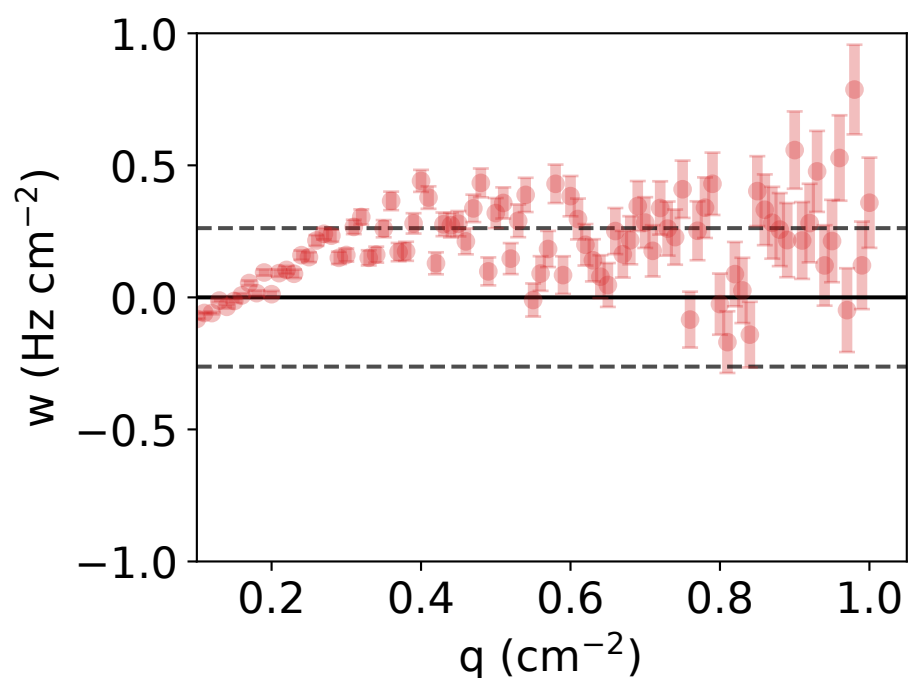
$\nu=1.658\pm0.022$, $M=16.301\pm0.887$ cm²($\nu-1$)/s
 $RMSE_{particle\ vs\ full}=0.264$ Hz/cm²



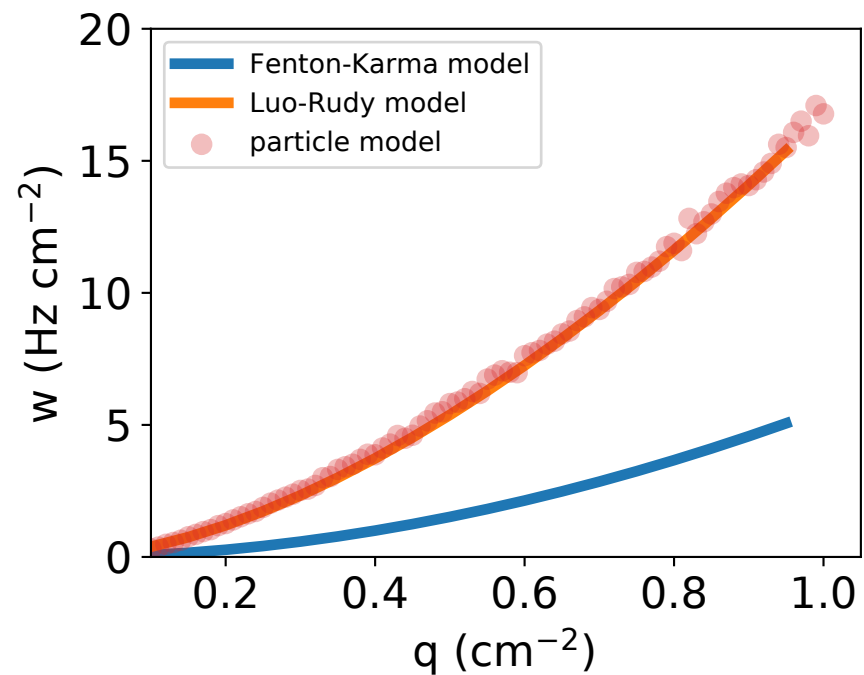
force_code=2, neighbors=0, reflect=0
 $r=0.16068$ cm, $\kappa=300.51700$ Hz
 $D=0.29845$ cm²/s, $a=10.01080$ cm²/s, $x_0=0$ cm



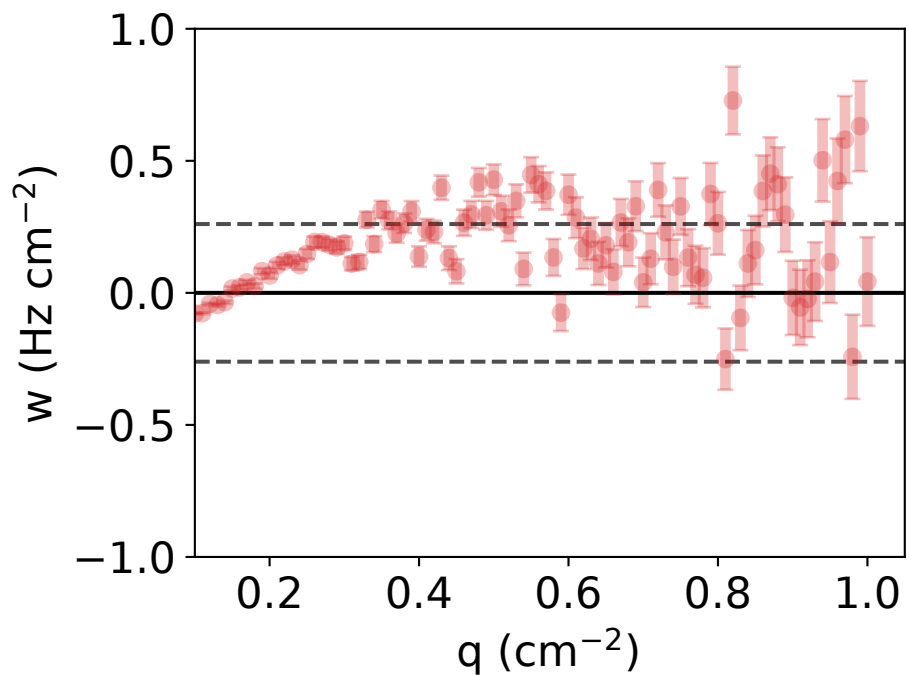
$\nu=1.649\pm0.018$, $M=16.770\pm0.711$ cm²($\nu-1$)/s
 $RMSE_{particle\ vs\ full}=0.262$ Hz/cm²



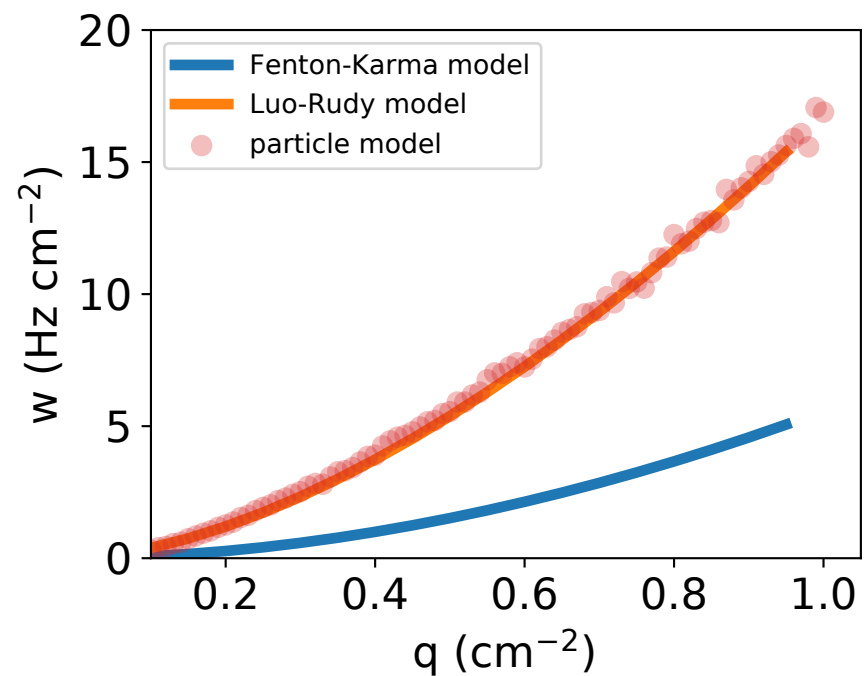
force_code=2, neighbors=0, reflect=0
 $r = 0.15999$ cm, $\kappa = 300.00000$ Hz
 $D = 0.71792$ cm²/s, $a = 9.81931$ cm²/s, $x_0 = 0$ cm



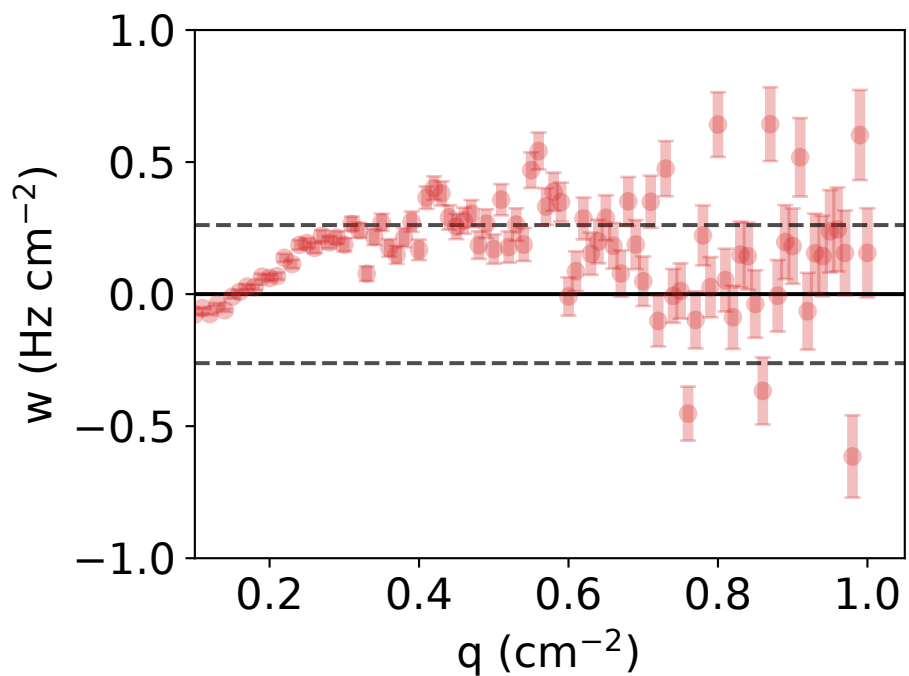
$\nu = 1.649 \pm 0.017$, $M = 16.724 \pm 0.710$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.261 Hz/cm²



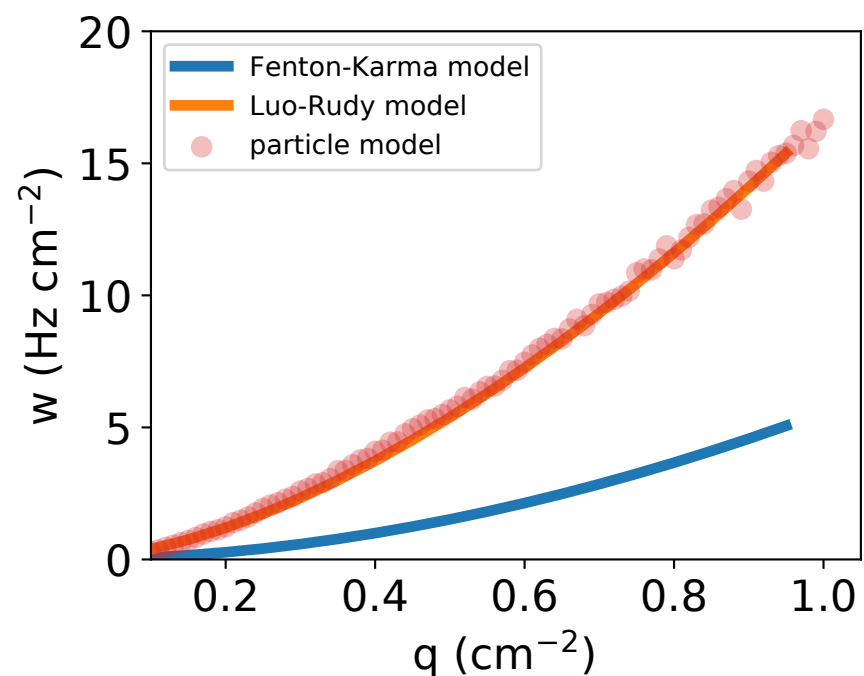
force_code=2, neighbors=0, reflect=0
 $r = 0.15908$ cm, $\kappa = 299.73500$ Hz
 $D = 0.79987$ cm²/s, $a = 9.80399$ cm²/s, $x_0 = 0$ cm



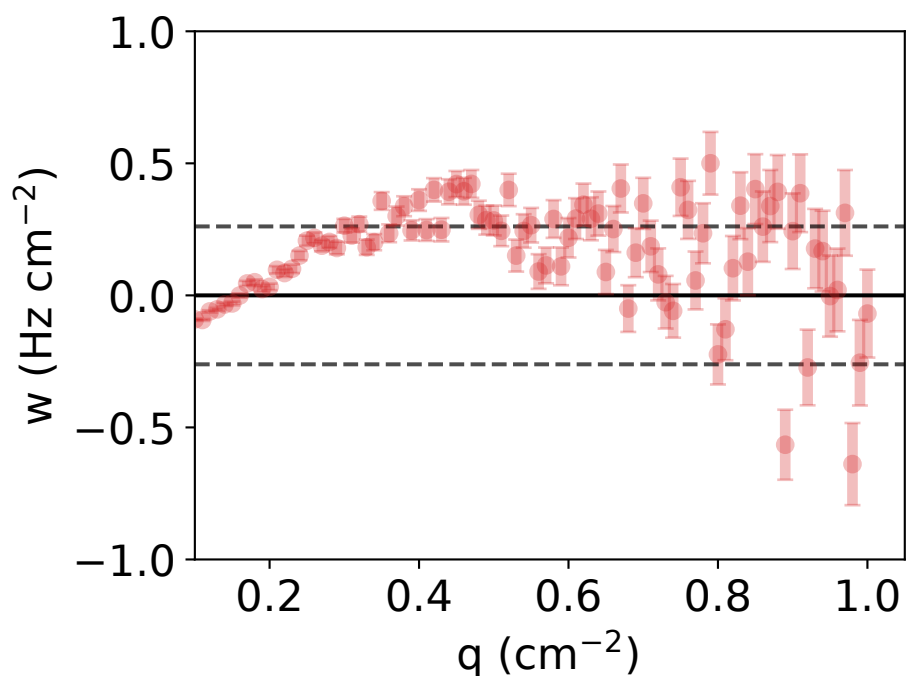
$\nu = 1.647 \pm 0.018$, $M = 16.587 \pm 0.769$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.261 Hz/cm²



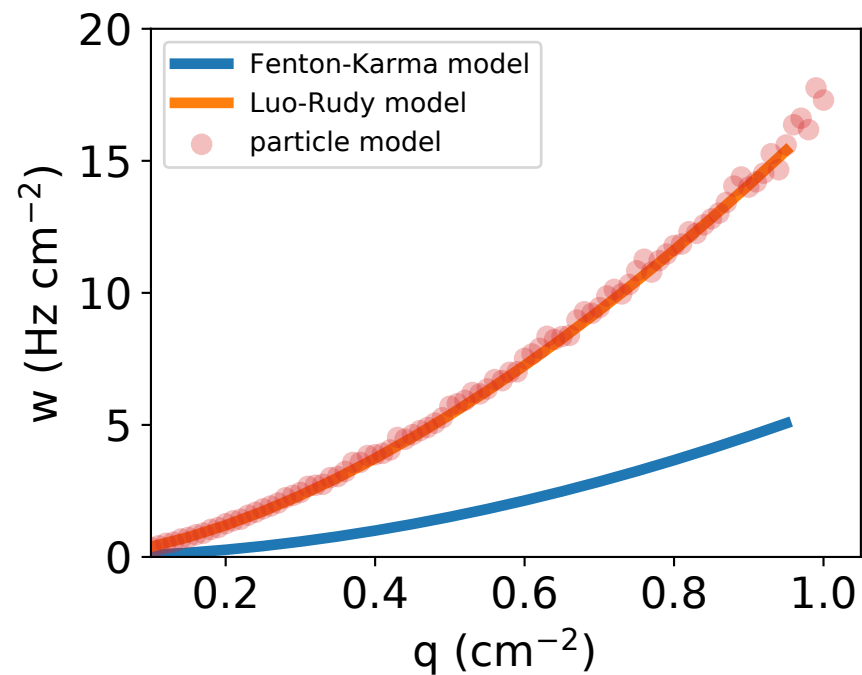
force_code=2, neighbors=0, reflect=0
 $r = 0.13198$ cm, $\kappa = 391.61700$ Hz
 $D = 0.70000$ cm²/s, $a = 9.23405$ cm²/s, $x_0 = 0$ cm



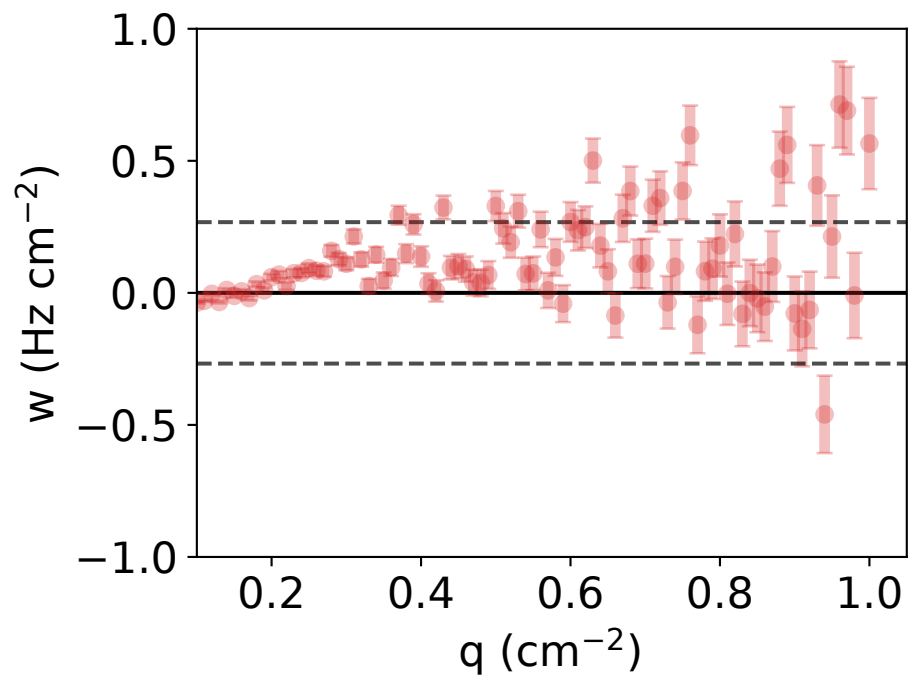
$\nu = 1.652 \pm 0.021$, $M = 16.481 \pm 0.840$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.261 Hz/cm²



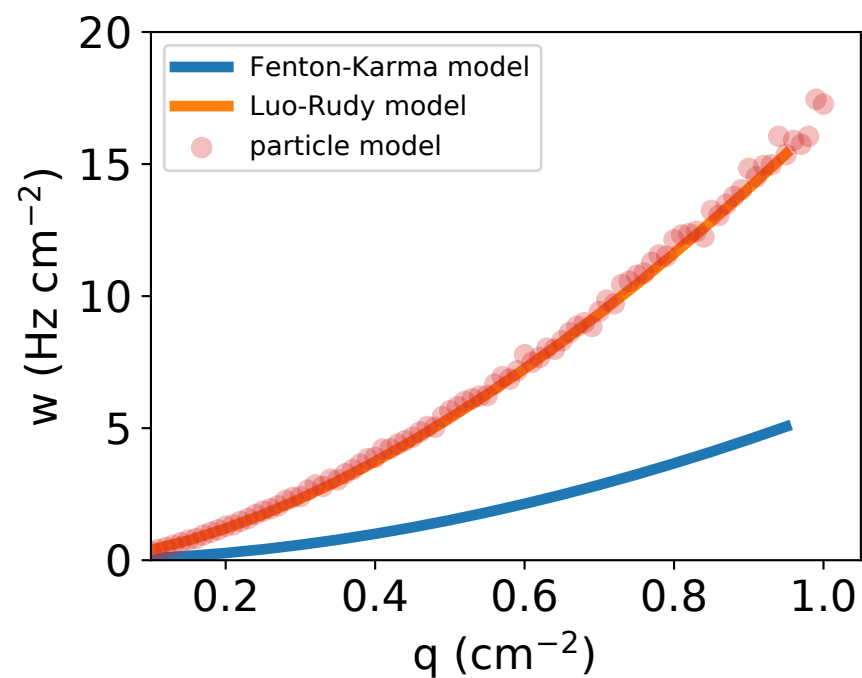
force_code=2, neighbors=0, reflect=0
 $r = 0.15902$ cm, $\kappa = 270.58600$ Hz
 $D = 0.00000$ cm²/s, $a = 18.82480$ cm²/s, $x_0 = 0$ cm



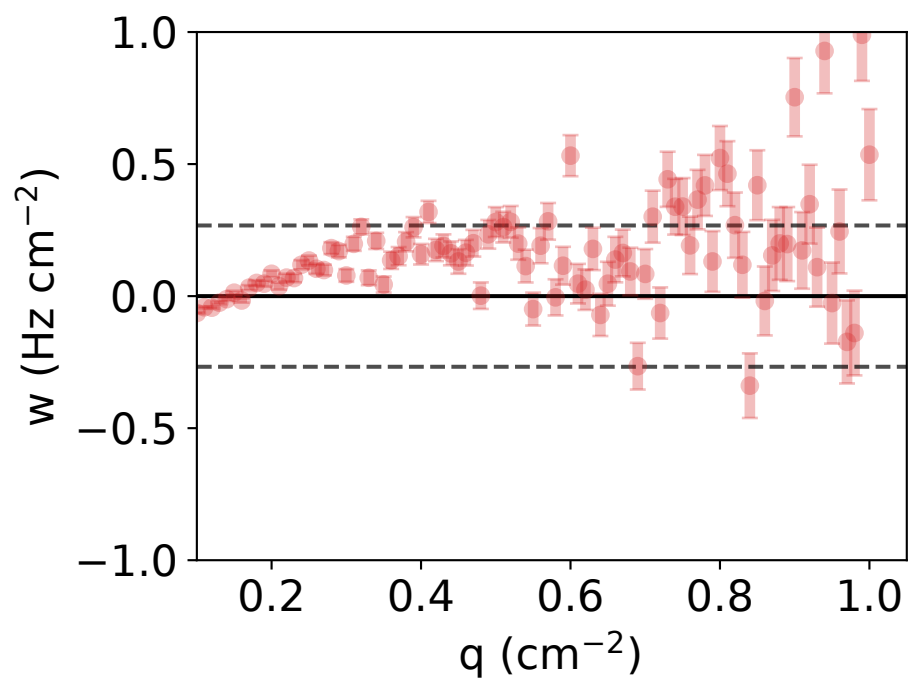
$\nu = 1.644 \pm 0.011$, $M = 16.903 \pm 0.514$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.268 Hz/cm²



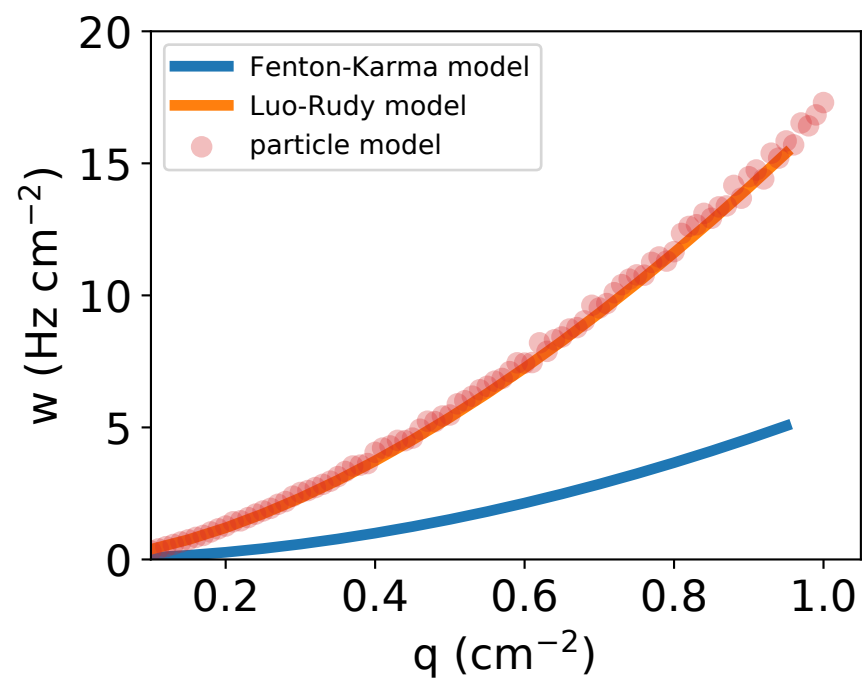
force_code=2, neighbors=0, reflect=0
 $r = 0.19113$ cm, $\kappa = 228.12800$ Hz
 $D = 0.56877$ cm²/s, $a = 10.56980$ cm²/s, $x_0 = 0$ cm



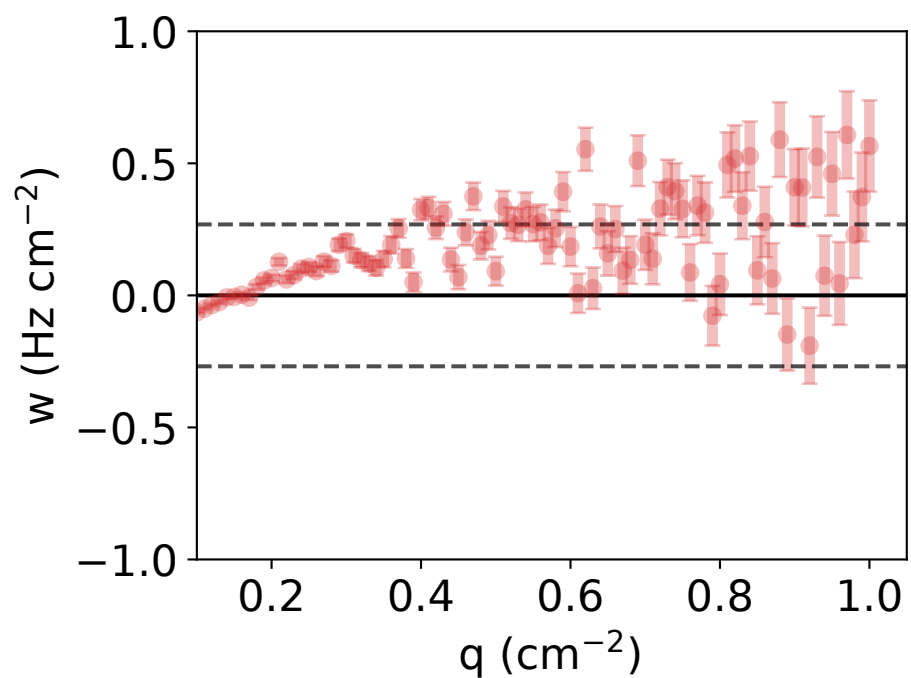
$\nu = 1.648 \pm 0.013$, $M = 16.882 \pm 0.594$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.267 Hz/cm²



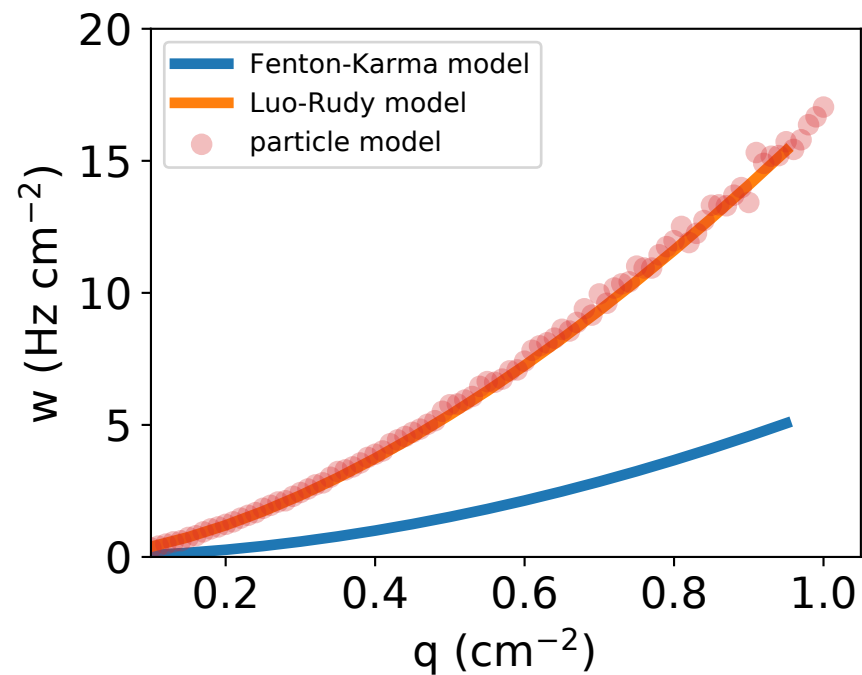
force_code=2, neighbors=0, reflect=0
 $r = 0.19794$ cm, $\kappa = 216.83800$ Hz
 $D = 0.43368$ cm²/s, $a = 10.73050$ cm²/s, $x_0 = 0$ cm



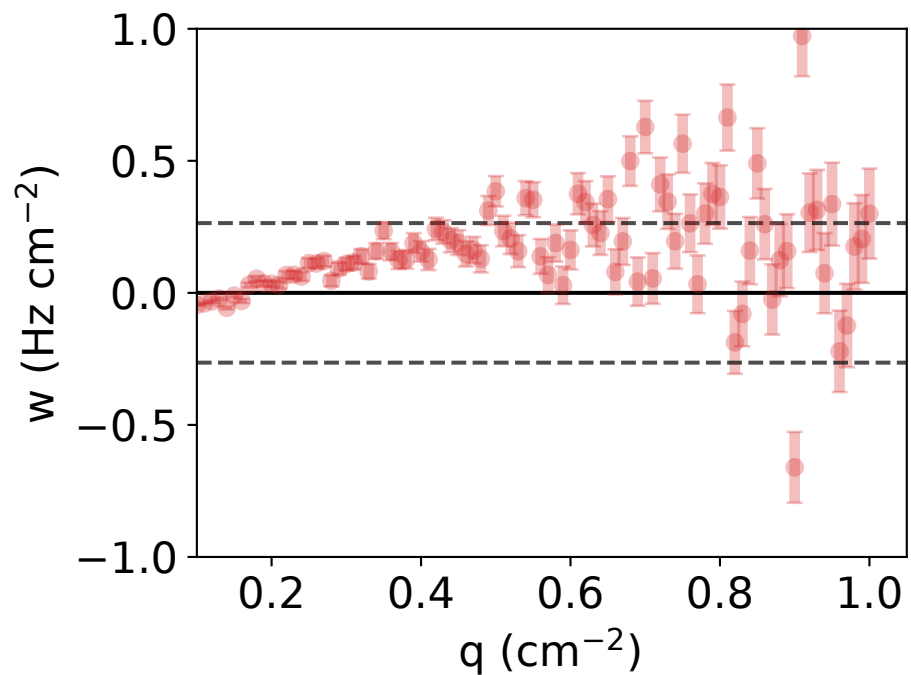
$\nu = 1.652 \pm 0.013$, $M = 16.912 \pm 0.562$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.269 Hz/cm²



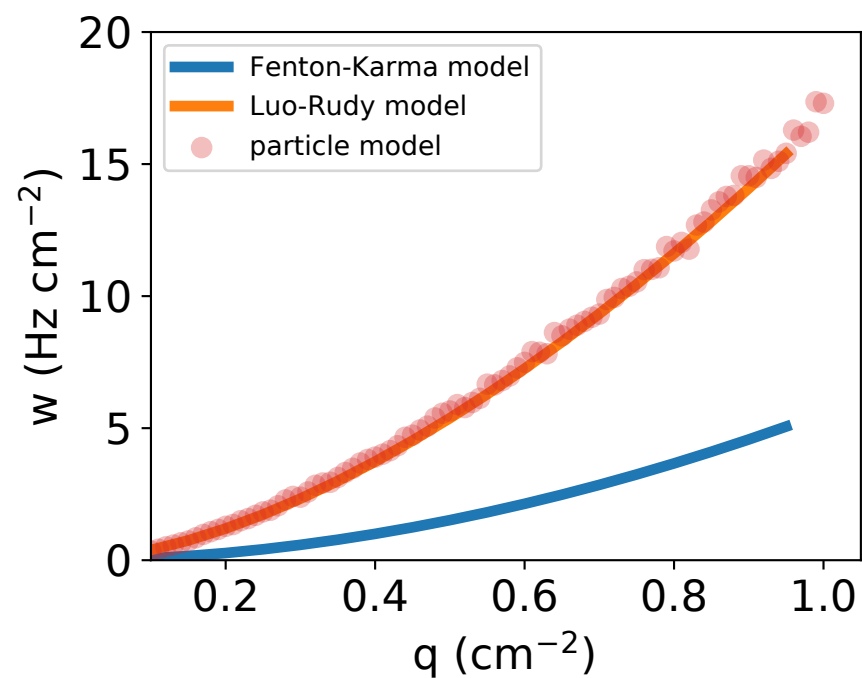
force_code=2, neighbors=0, reflect=0
 $r = 0.14916$ cm, $\kappa = 300.00000$ Hz
 $D = 0.00000$ cm²/s, $a = 18.12830$ cm²/s, $x_0 = 0$ cm



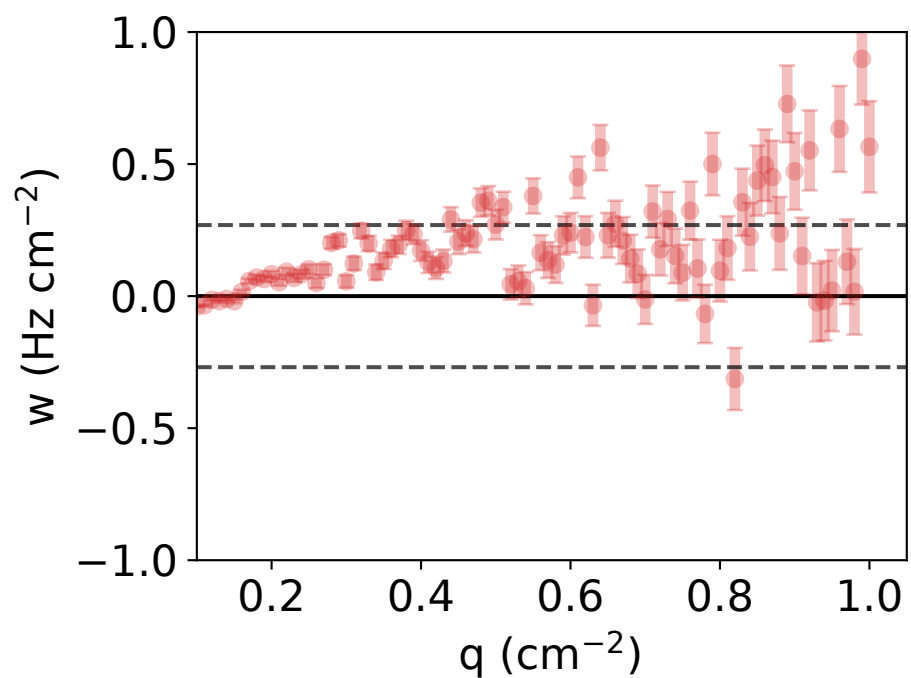
$\nu = 1.653 \pm 0.012$, $M = 16.829 \pm 0.544$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.264 Hz/cm²



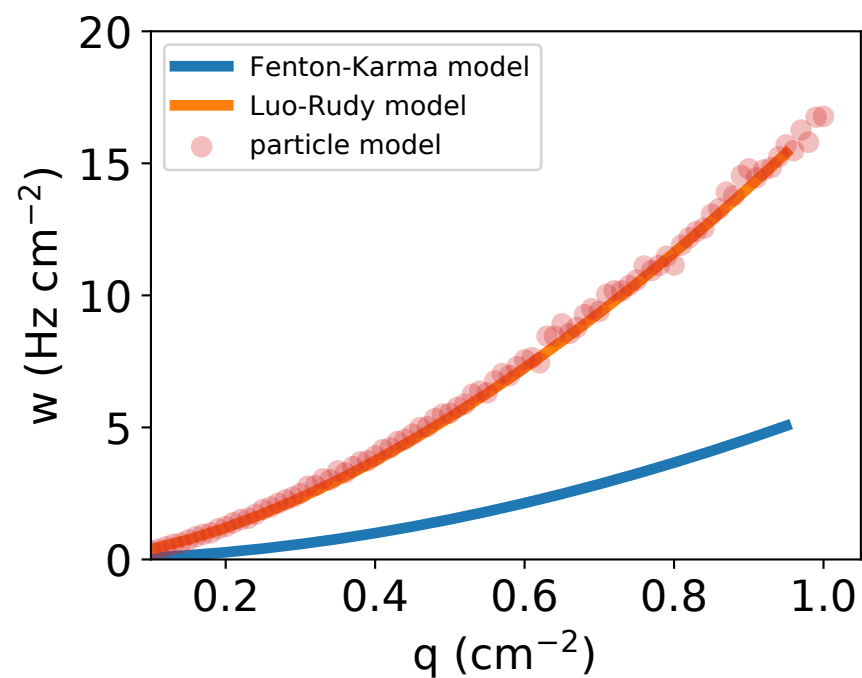
force_code=2, neighbors=0, reflect=0
 $r = 0.20694$ cm, $\kappa = 200.00000$ Hz
 $D = 0.32658$ cm²/s, $a = 11.17910$ cm²/s, $x_0 = 0$ cm



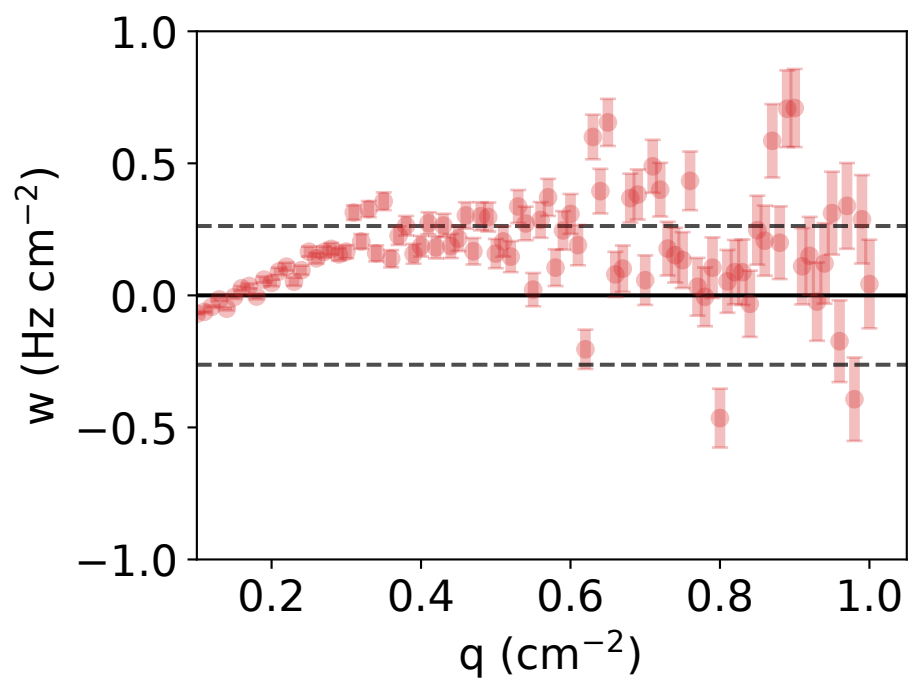
$\nu = 1.641 \pm 0.011$, $M = 16.932 \pm 0.508$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.269 Hz/cm²



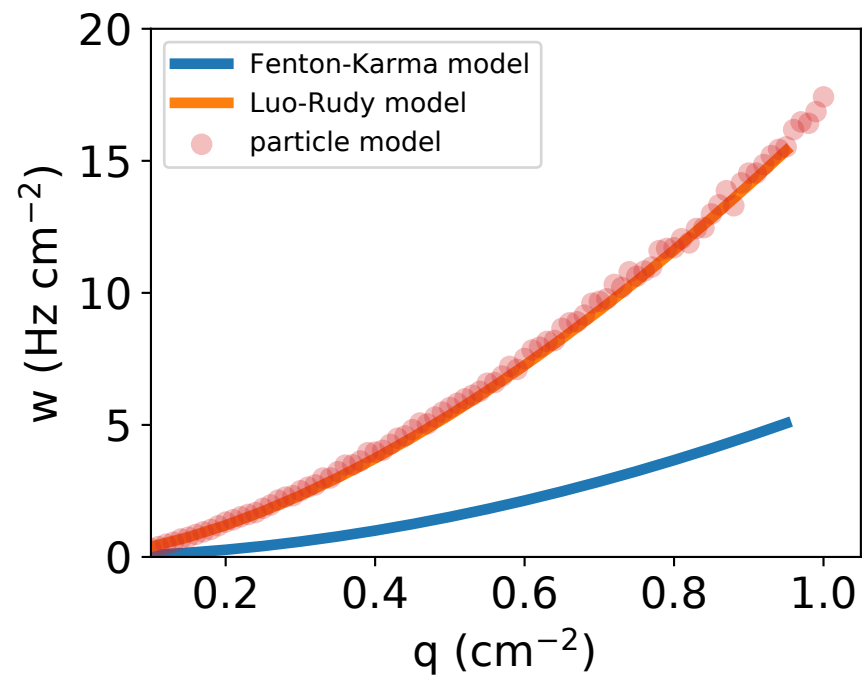
force_code=2, neighbors=0, reflect=0
 $r = 0.16134$ cm, $\kappa = 300.00000$ Hz
 $D = 0.40000$ cm²/s, $a = 9.92032$ cm²/s, $x_0 = 0$ cm



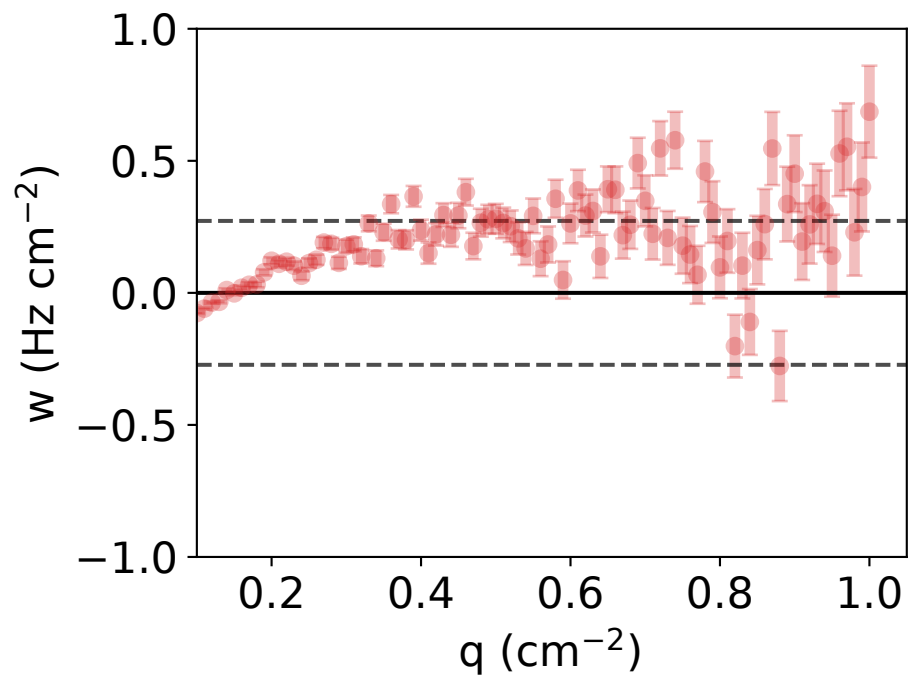
$\nu = 1.648 \pm 0.016$, $M = 16.696 \pm 0.690$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.263 Hz/cm²



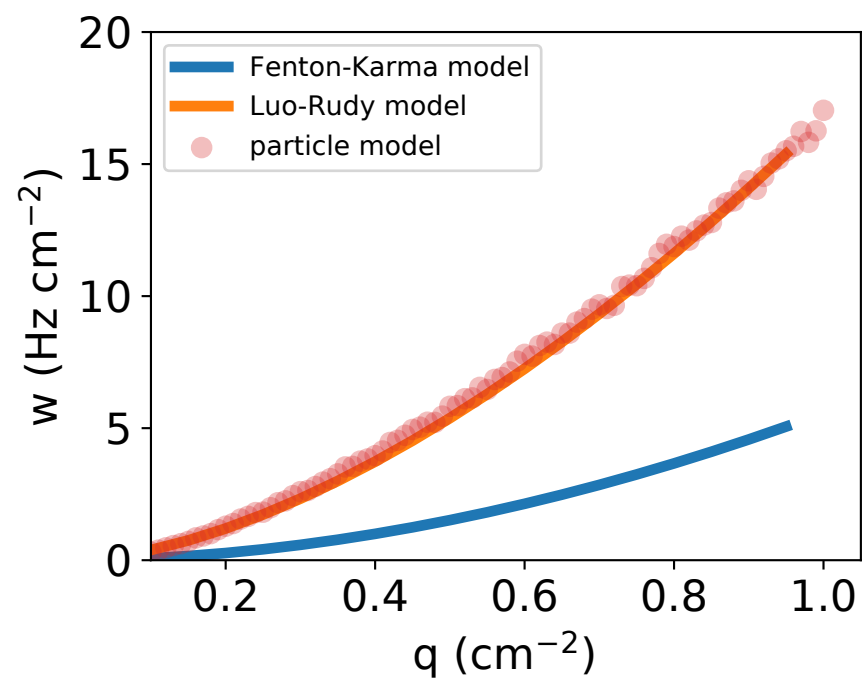
force_code=2, neighbors=0, reflect=0
 $r = 0.16684$ cm, $\kappa = 283.67300$ Hz
 $D = 0.50000$ cm²/s, $a = 10.13010$ cm²/s, $x_0 = 0$ cm



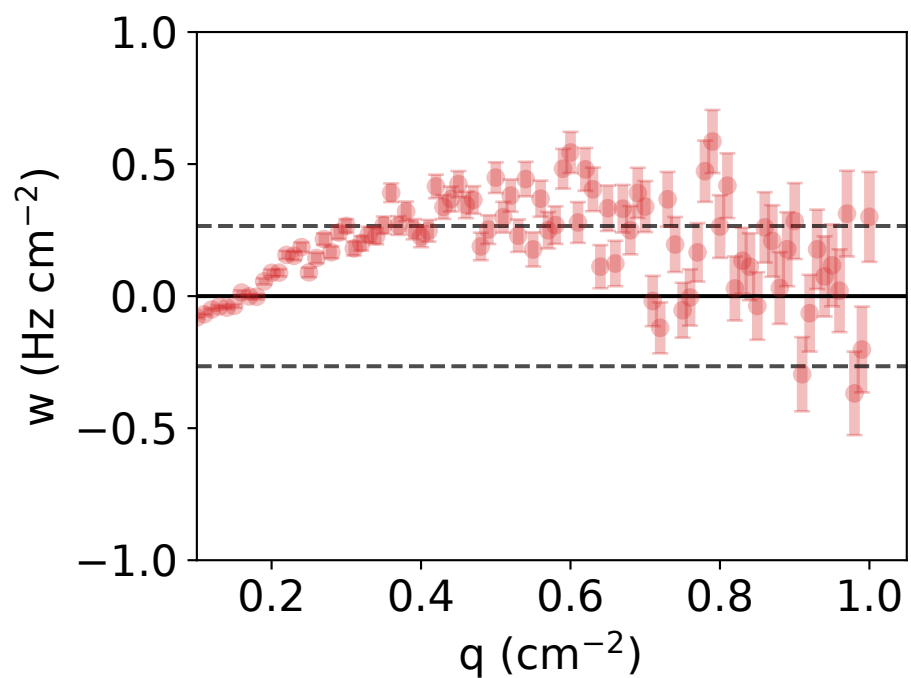
$\nu = 1.648 \pm 0.015$, $M = 16.858 \pm 0.625$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.272 Hz/cm²



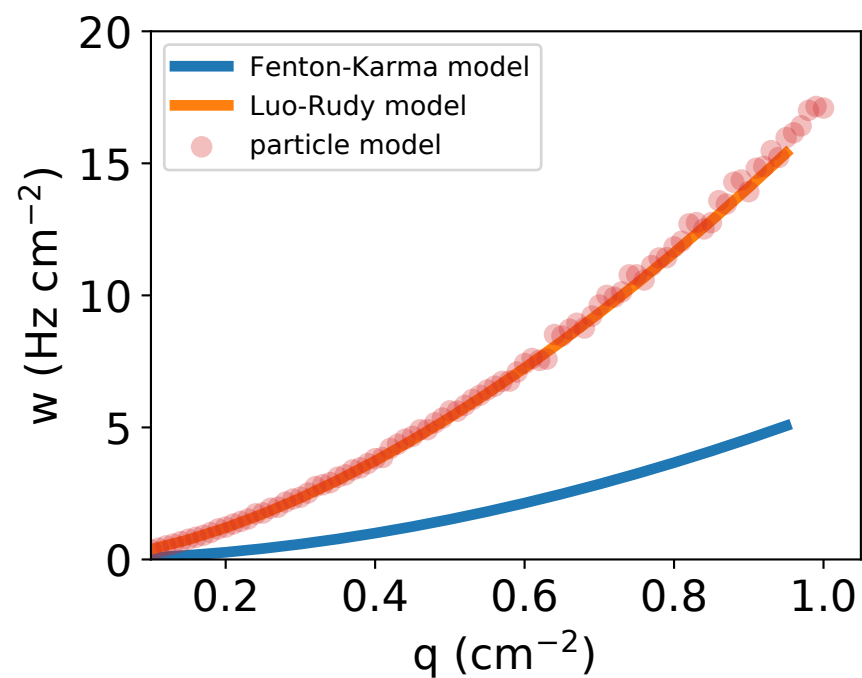
force_code=2, neighbors=0, reflect=0
 $r = 0.13188$ cm, $\kappa = 396.73900$ Hz
 $D = 0.49131$ cm²/s, $a = 9.33175$ cm²/s, $x_0 = 0$ cm



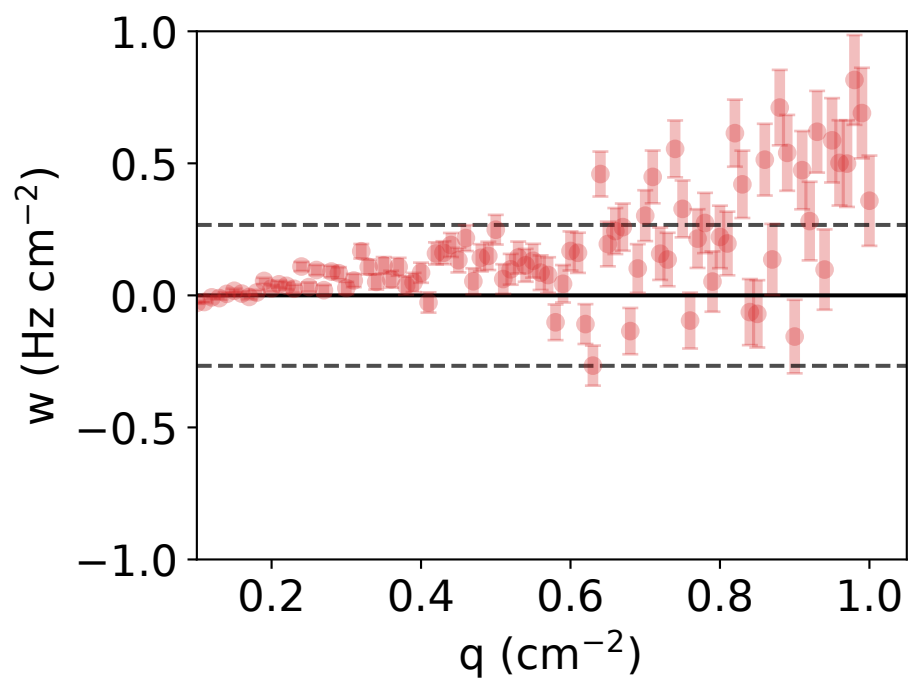
$\nu = 1.649 \pm 0.019$, $M = 16.556 \pm 0.772$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.265 Hz/cm²



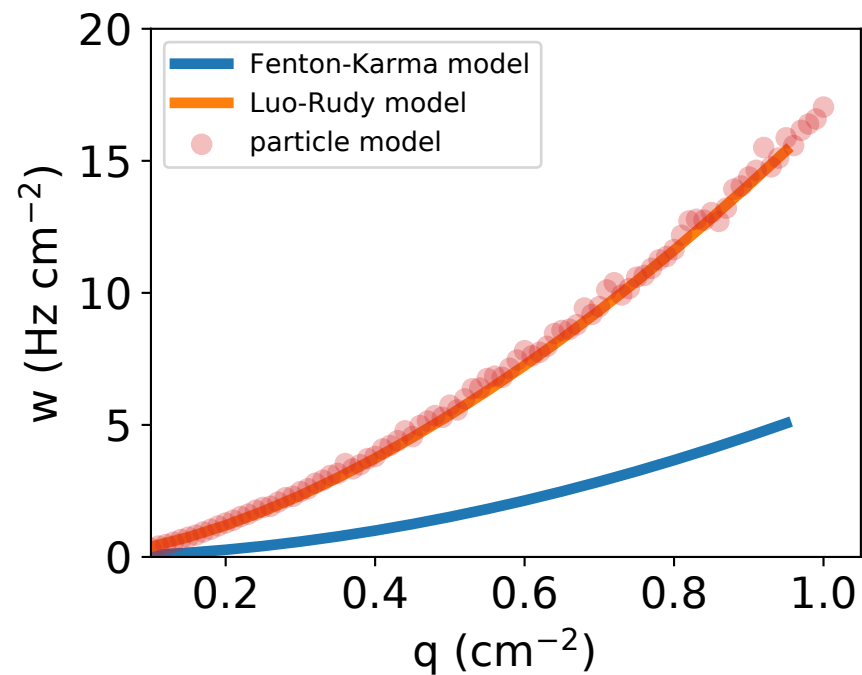
force_code=2, neighbors=0, reflect=0
 $r = 0.29225$ cm, $\kappa = 111.63200$ Hz
 $D = 0.52326$ cm²/s, $a = 13.63930$ cm²/s, $x_0 = 0$ cm



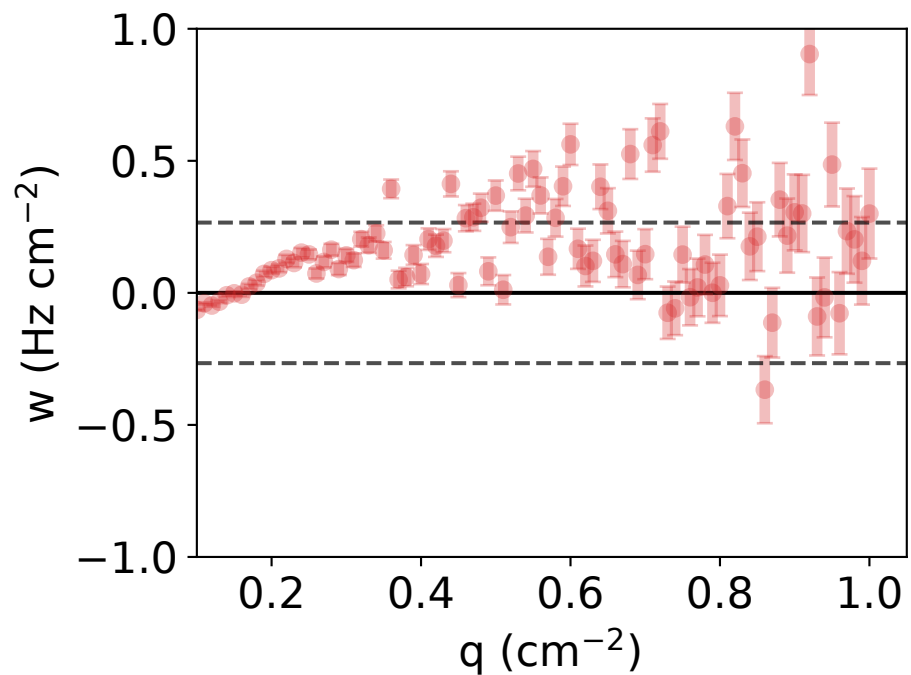
$\nu = 1.648 \pm 0.008$, $M = 17.124 \pm 0.392$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.267 Hz/cm²



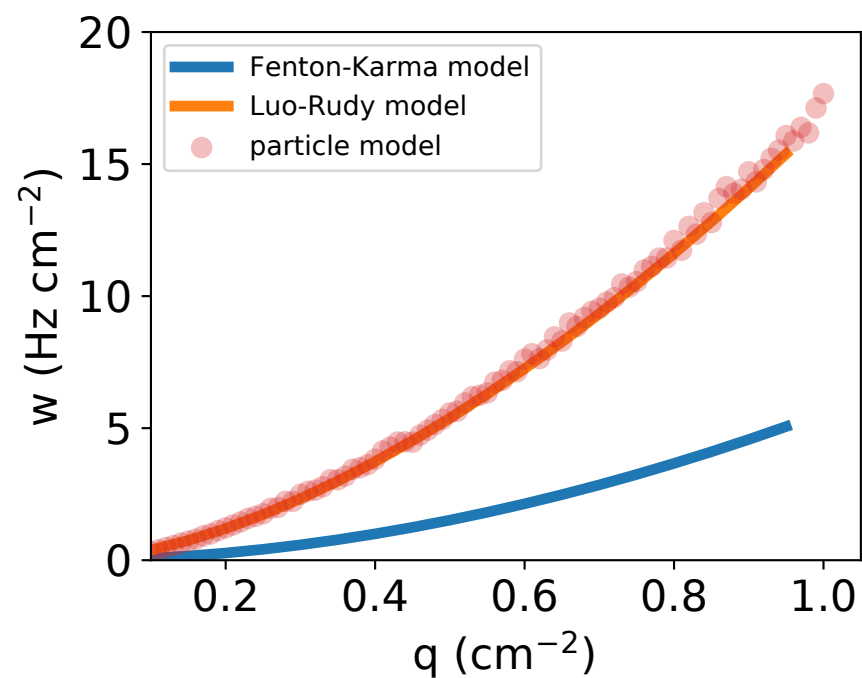
force_code=2, neighbors=0, reflect=0
 $r = 0.18004$ cm, $\kappa = 250.00000$ Hz
 $D = 0.53363$ cm²/s, $a = 10.37170$ cm²/s, $x_0 = 0$ cm



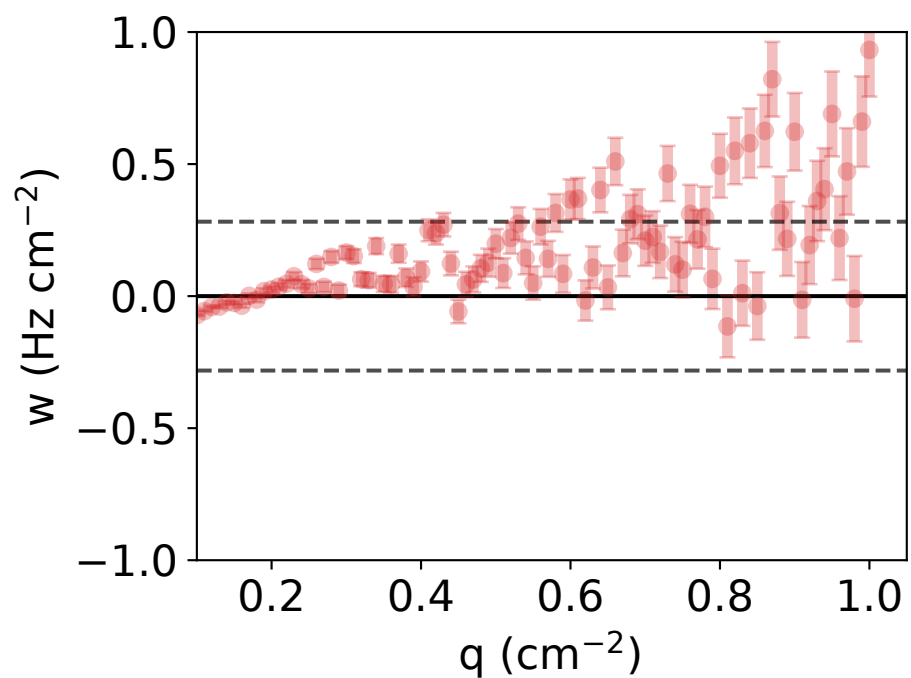
$\nu = 1.646 \pm 0.015$, $M = 16.782 \pm 0.638$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.266 Hz/cm²



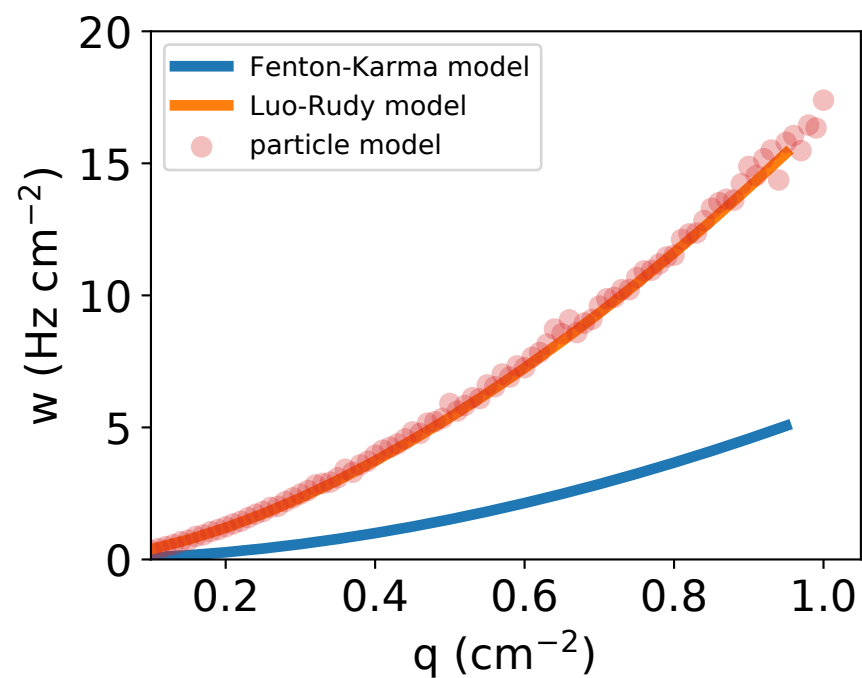
force_code=2, neighbors=0, reflect=0
 $r = 0.19798$ cm, $\kappa = 219.86000$ Hz
 $D = 0.65366$ cm²/s, $a = 10.14340$ cm²/s, $x_0 = 0$ cm



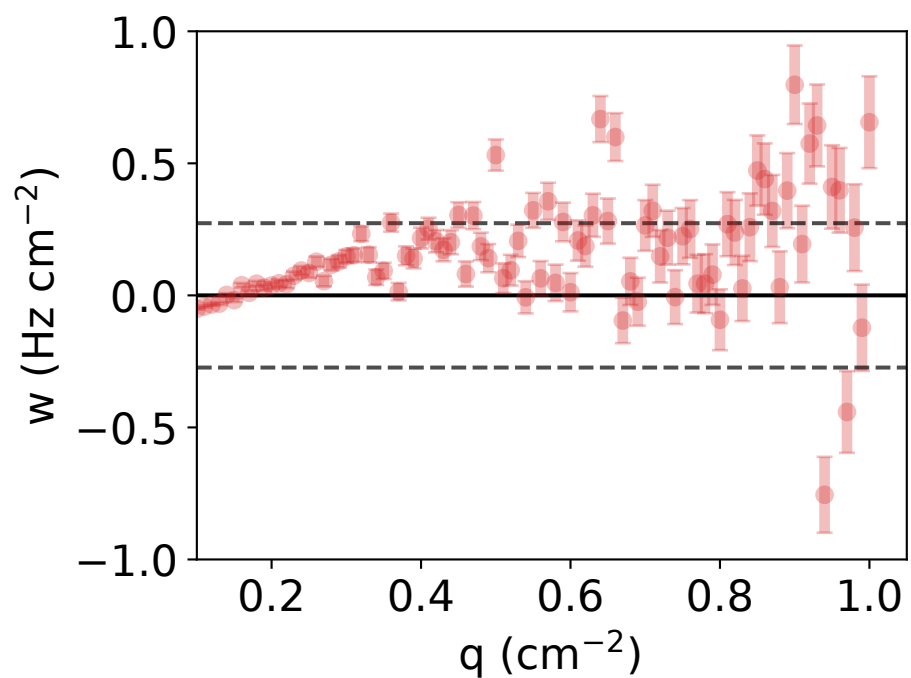
$\nu = 1.670 \pm 0.012$, $M = 17.074 \pm 0.528$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.282 Hz/cm²



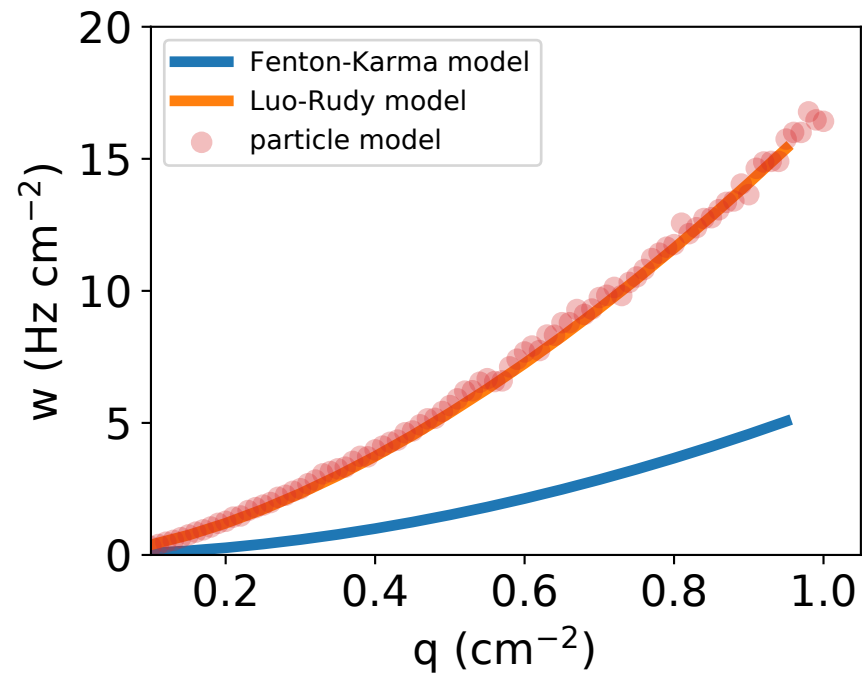
force_code=2, neighbors=0, reflect=0
 $r = 0.14630$ cm, $\kappa = 310.95100$ Hz
 $D = 0.00000$ cm²/s, $a = 18.00940$ cm²/s, $x_0 = 0$ cm



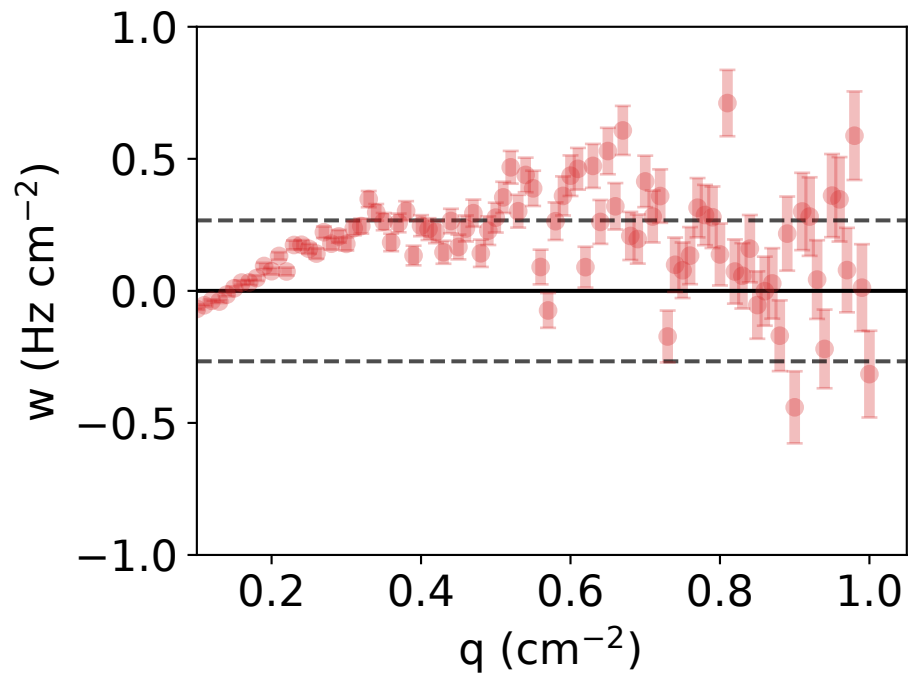
$\nu = 1.648 \pm 0.012$, $M = 16.844 \pm 0.574$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.273 Hz/cm²



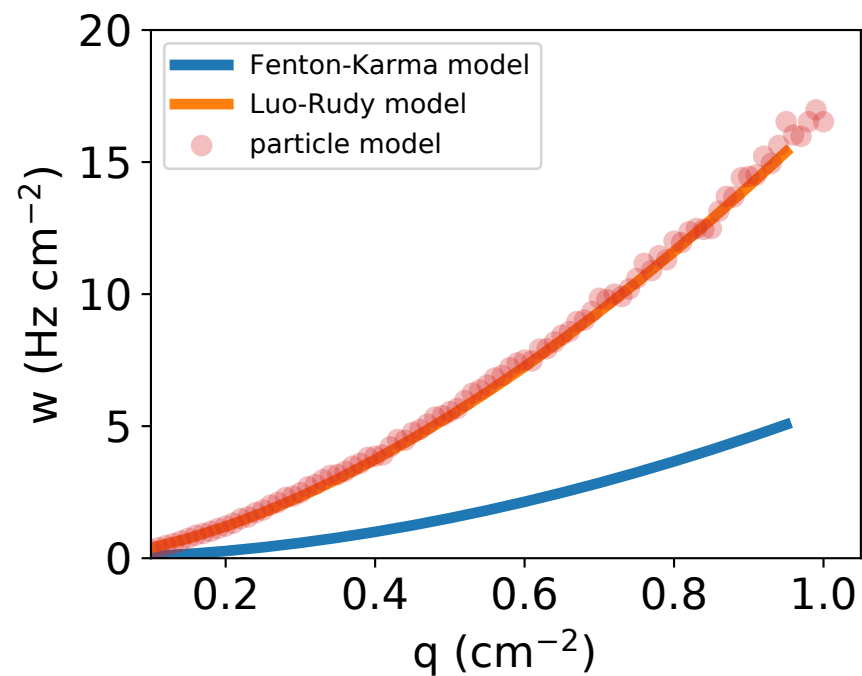
force_code=2, neighbors=0, reflect=0
 $r = 0.15917$ cm, $\kappa = 300.00000$ Hz
 $D = 0.70811$ cm²/s, $a = 9.93353$ cm²/s, $x_0 = 0$ cm



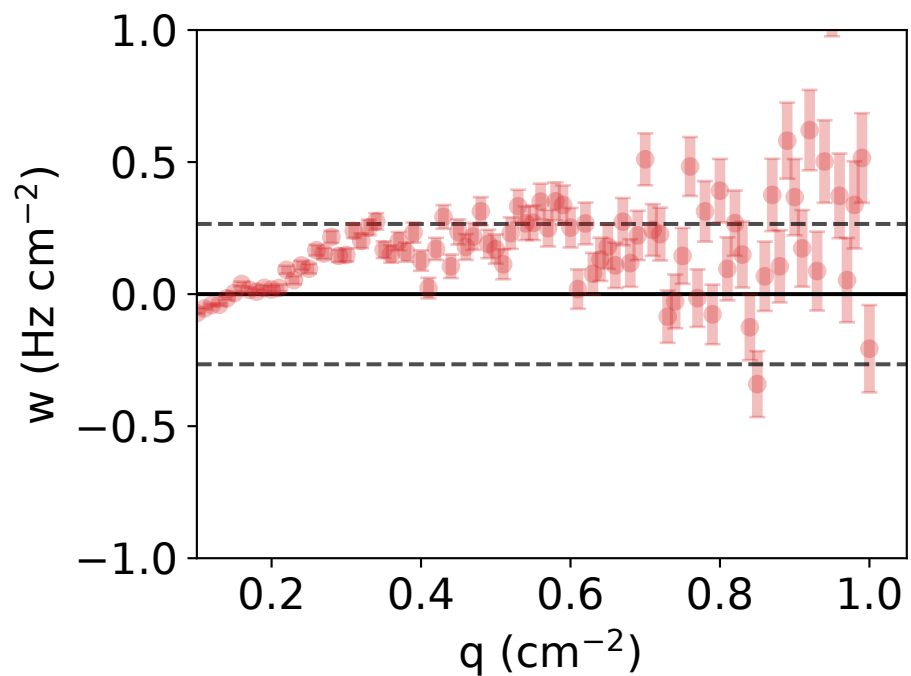
$\nu = 1.638 \pm 0.017$, $M = 16.626 \pm 0.697$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.267 Hz/cm²



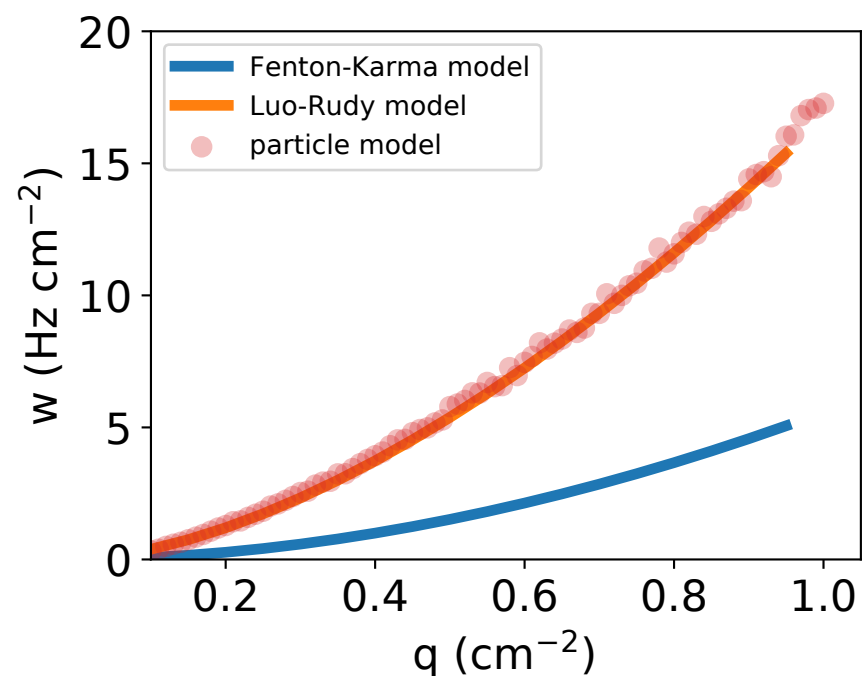
force_code=2, neighbors=0, reflect=0
 $r = 0.18020$ cm, $\kappa = 250.00000$ Hz
 $D = 0.61942$ cm²/s, $a = 10.24270$ cm²/s, $x_0 = 0$ cm



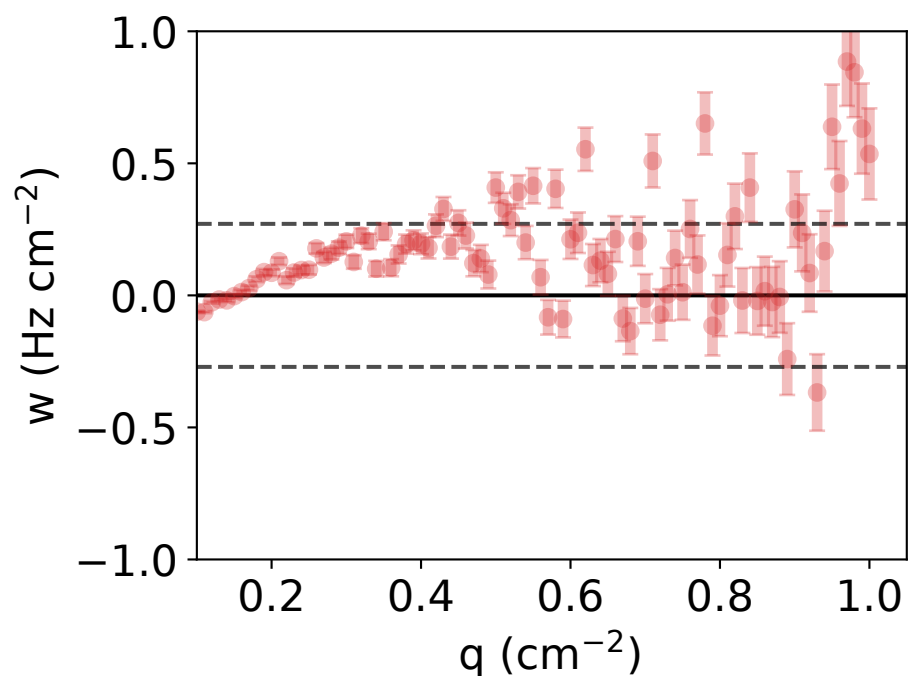
$\nu = 1.652 \pm 0.014$, $M = 16.838 \pm 0.621$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.266 Hz/cm²



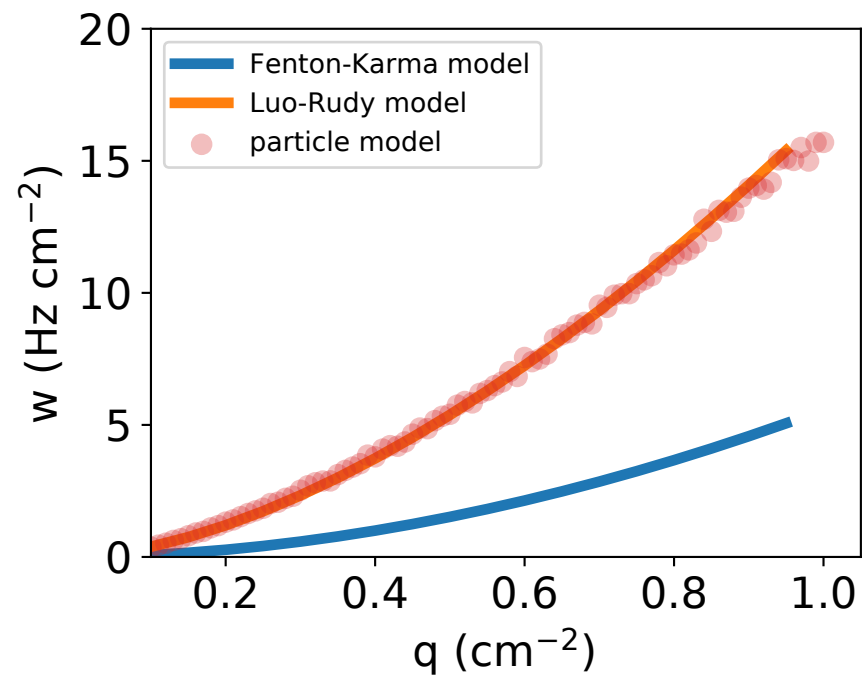
force_code=2, neighbors=0, reflect=0
 $r = 0.18205$ cm, $\kappa = 247.12500$ Hz
 $D = 0.21725$ cm²/s, $a = 10.65790$ cm²/s, $x_0 = 0$ cm



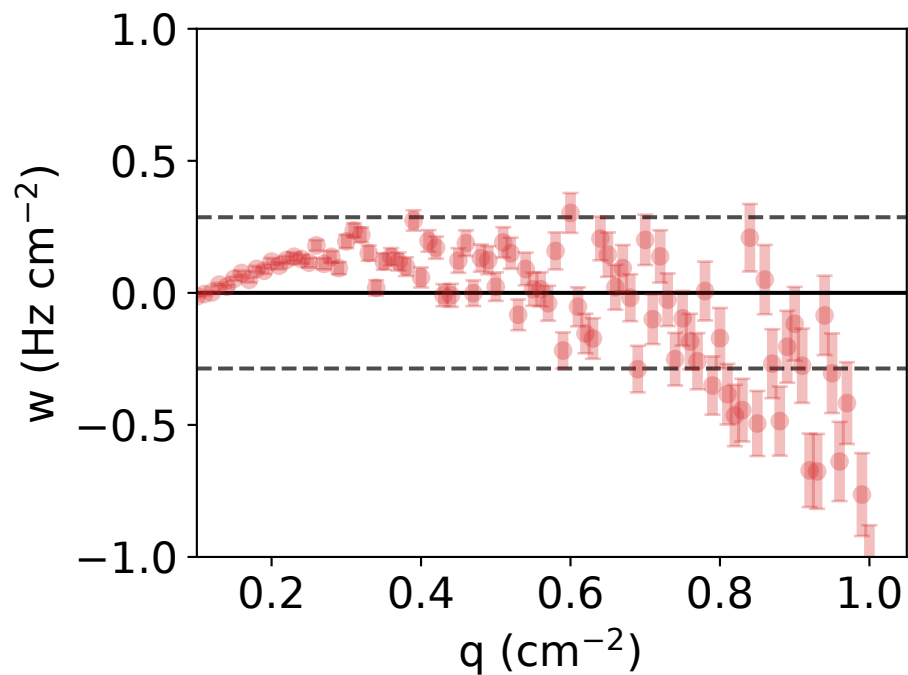
$\nu = 1.642 \pm 0.015$, $M = 16.810 \pm 0.646$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.271 Hz/cm²



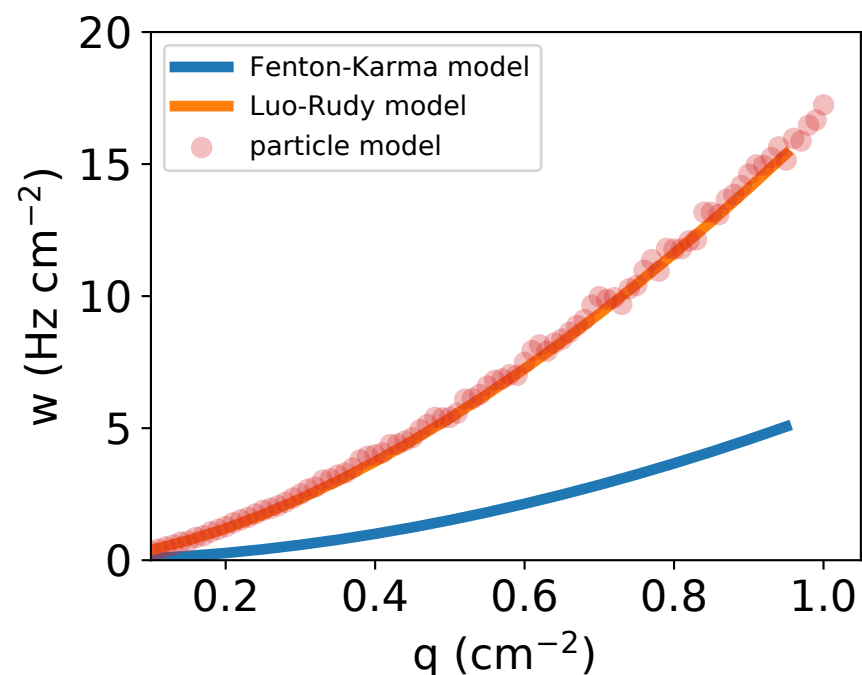
force_code=2, neighbors=0, reflect=0
 $r = 0.16243$ cm, $\kappa = 246.17900$ Hz
 $D = 0.00764$ cm²/s, $a = 17.96320$ cm²/s, $x_0 = 0$ cm



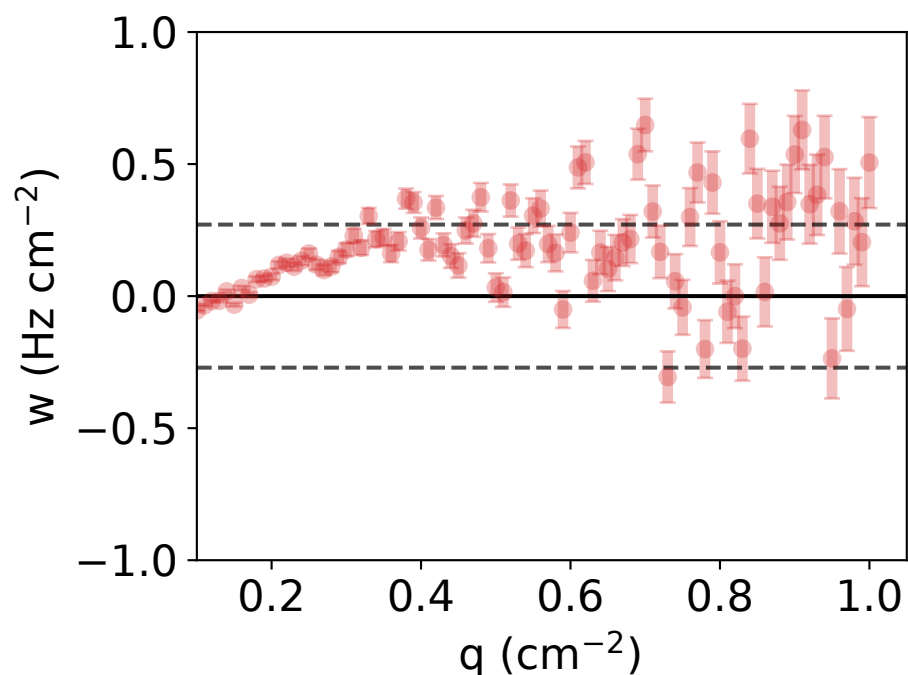
$\nu = 1.590 \pm 0.010$, $M = 16.050 \pm 0.458$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.286 Hz/cm²



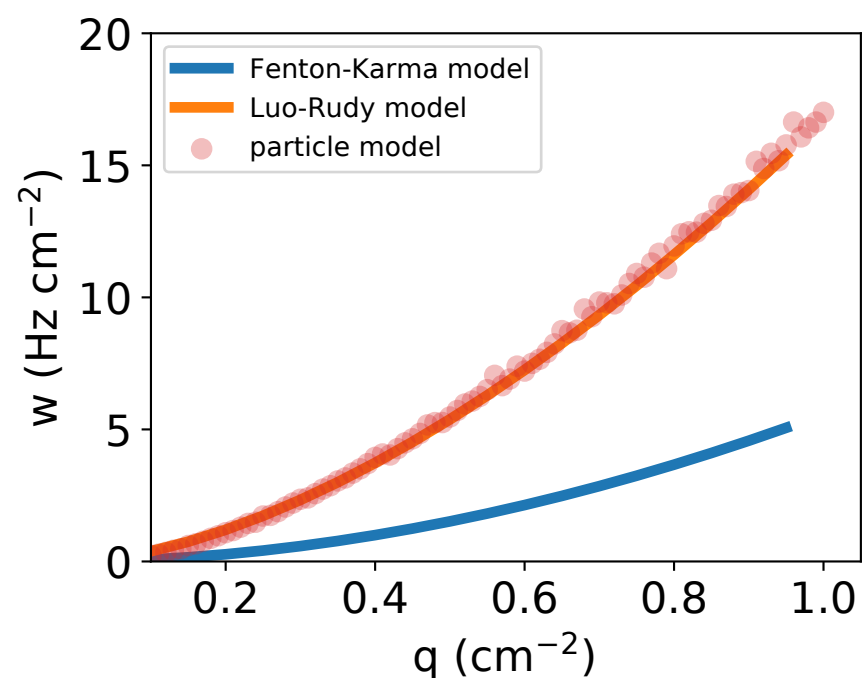
force_code=2, neighbors=0, reflect=0
 $r = 0.19262$ cm, $\kappa = 227.66400$ Hz
 $D = 0.18934$ cm²/s, $a = 11.19860$ cm²/s, $x_0 = 0$ cm



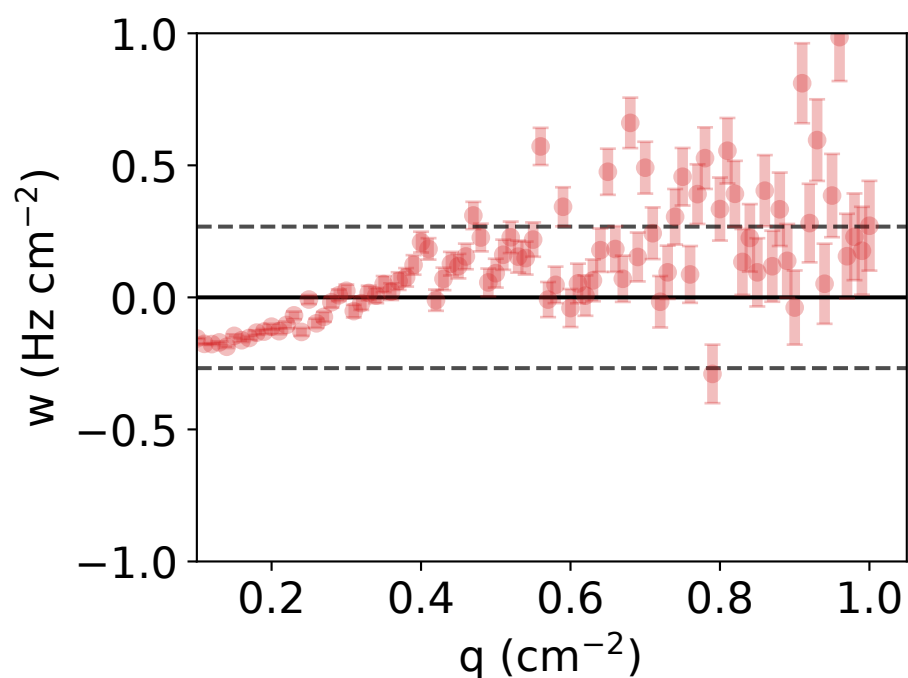
$\nu = 1.637 \pm 0.014$, $M = 16.829 \pm 0.601$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.271 Hz/cm²



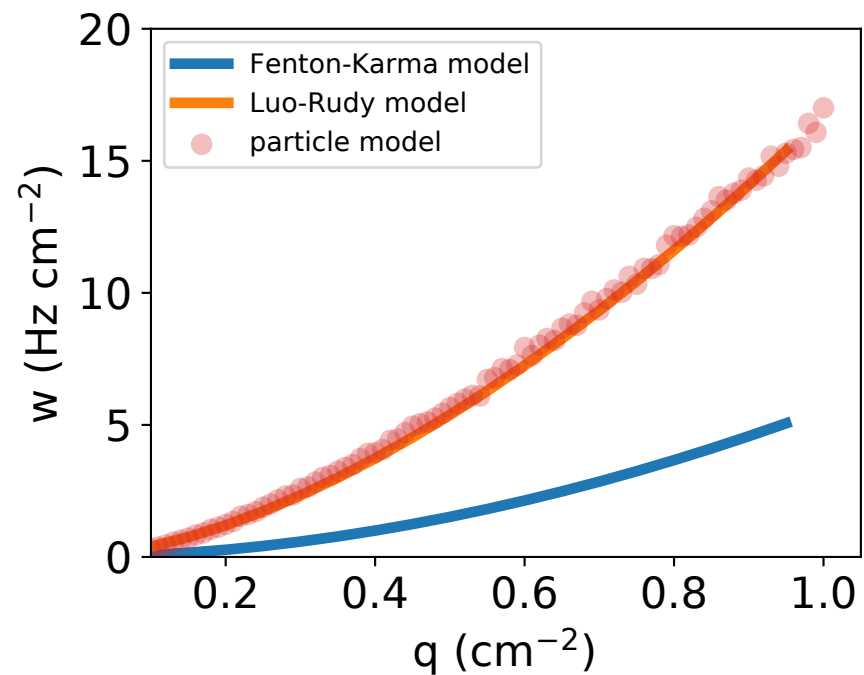
force_code=2, neighbors=0, reflect=0
 $r = 0.09717$ cm, $\kappa = 735.32700$ Hz
 $D = 0.38237$ cm²/s, $a = 6.60958$ cm²/s, $x_0 = 0$ cm



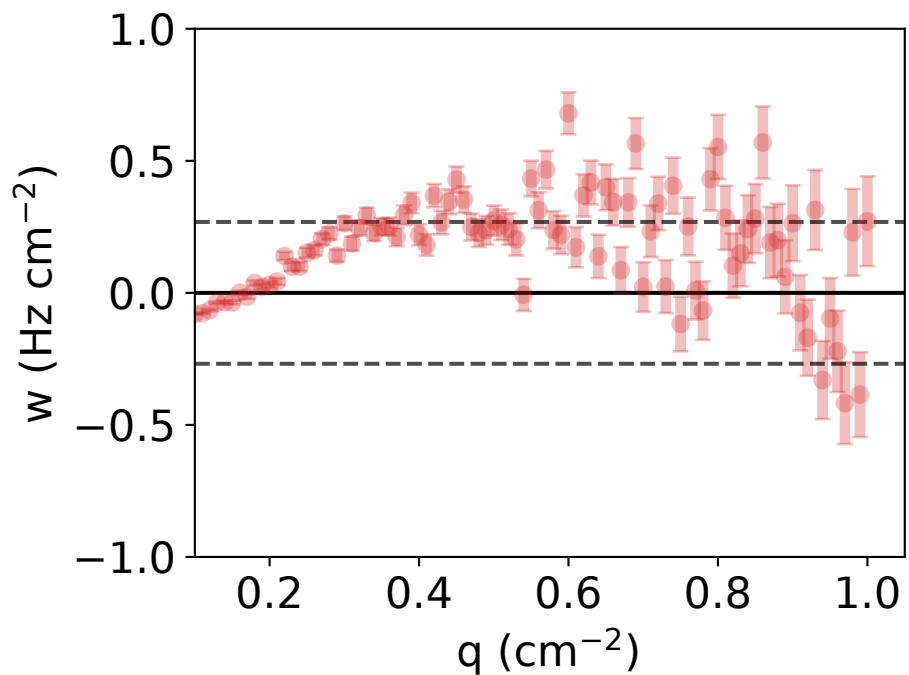
$\nu = 1.782 \pm 0.025$, $M = 16.929 \pm 1.018$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.268 Hz/cm²



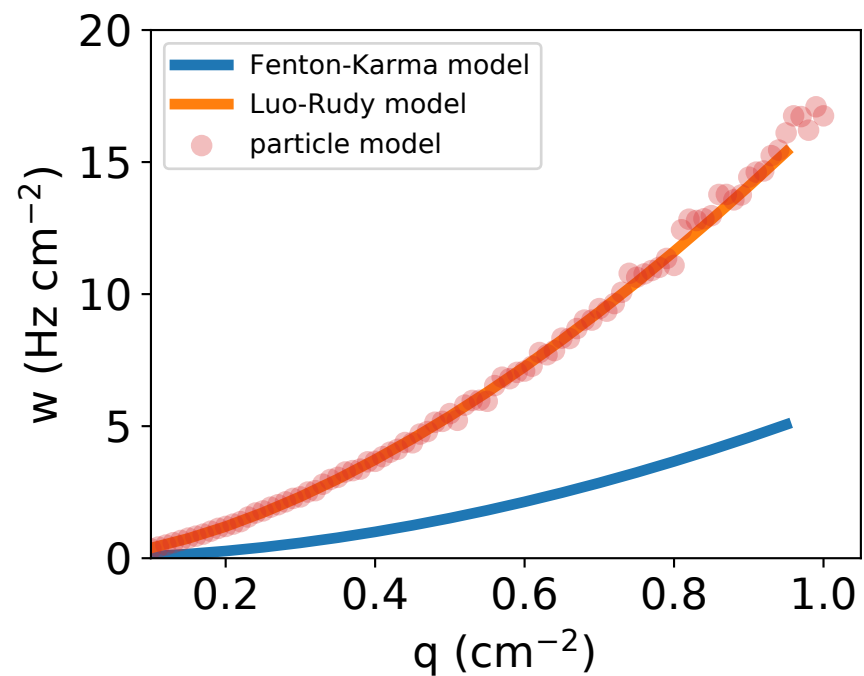
force_code=2, neighbors=0, reflect=0
 $r = 0.13211$ cm, $\kappa = 394.46300$ Hz
 $D = 0.49723$ cm²/s, $a = 9.28497$ cm²/s, $x_0 = 0$ cm



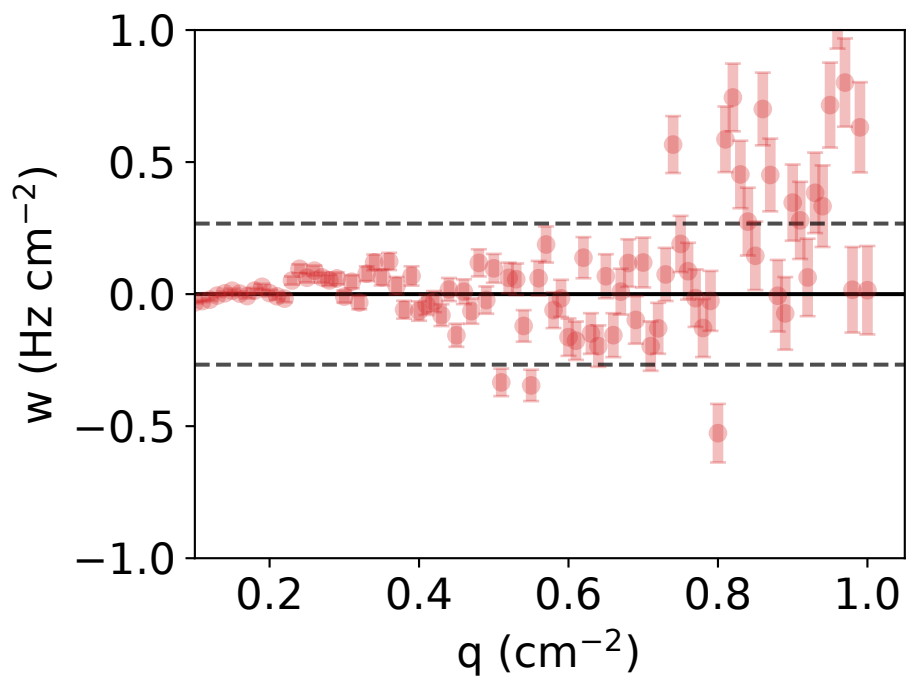
$\nu = 1.655 \pm 0.019$, $M = 16.553 \pm 0.779$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.269 Hz/cm²



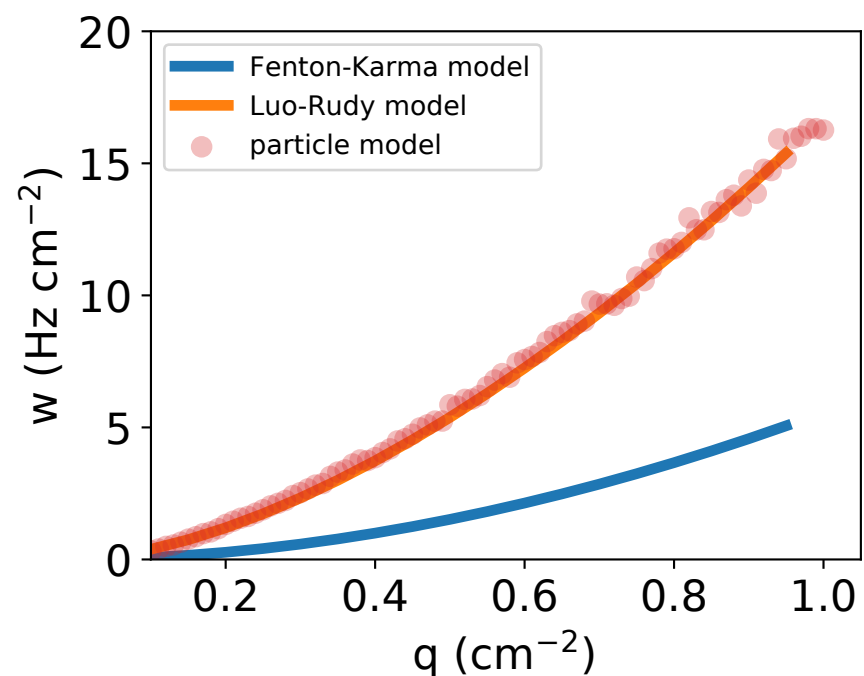
force_code=2, neighbors=0, reflect=0
 $r = 0.30545$ cm, $\kappa = 100.00000$ Hz
 $D = 0.60000$ cm²/s, $a = 13.96880$ cm²/s, $x_0 = 0$ cm



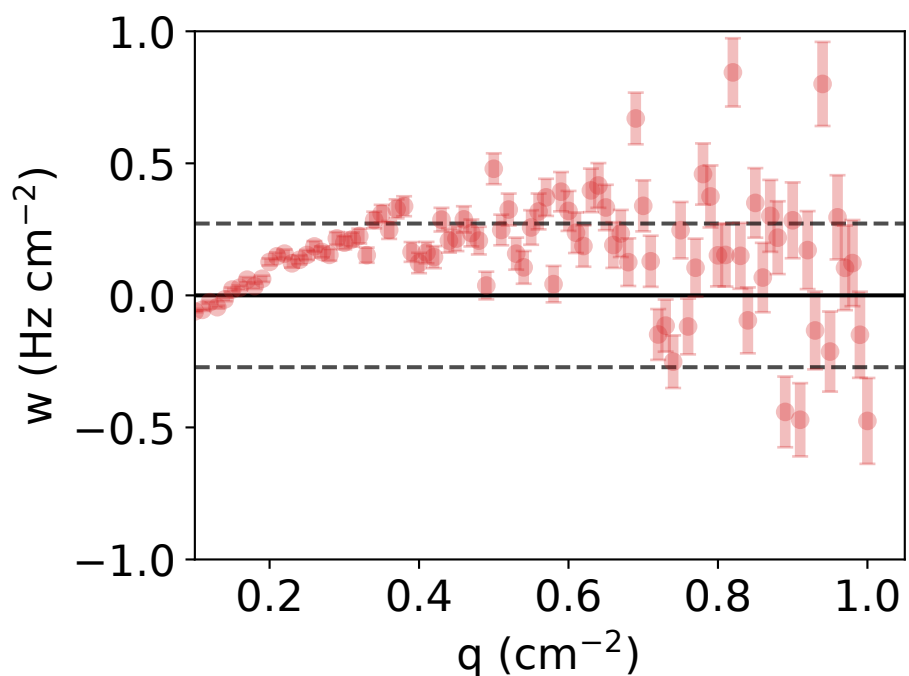
$\nu = 1.649 \pm 0.009$, $M = 17.085 \pm 0.497$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.267 Hz/cm²



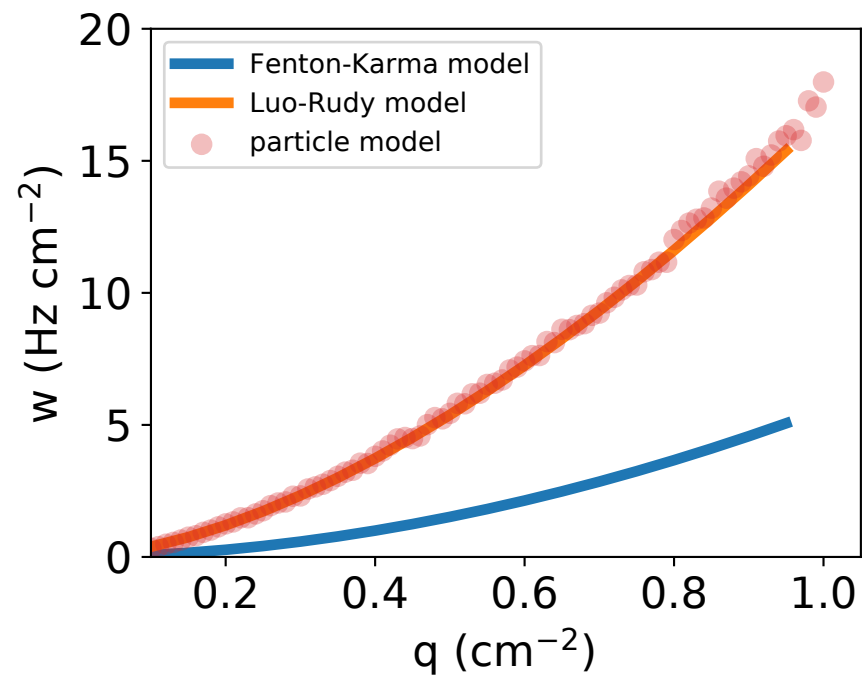
force_code=2, neighbors=0, reflect=0
 $r = 0.15953$ cm, $\kappa = 299.13100$ Hz
 $D = 0.10435$ cm²/s, $a = 10.64080$ cm²/s, $x_0 = 0$ cm



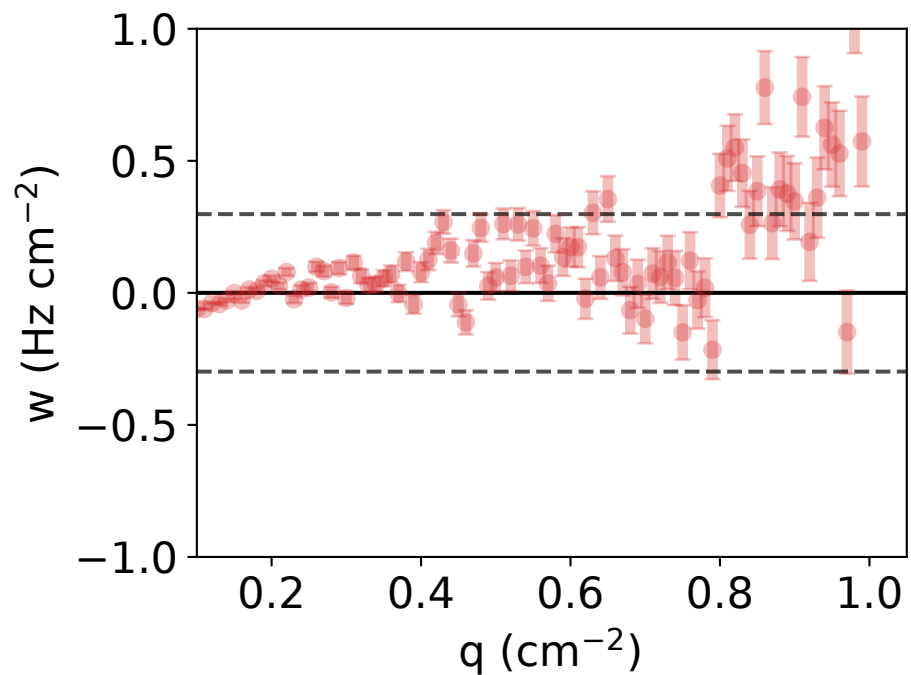
$\nu = 1.633 \pm 0.016$, $M = 16.591 \pm 0.697$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.272 Hz/cm²



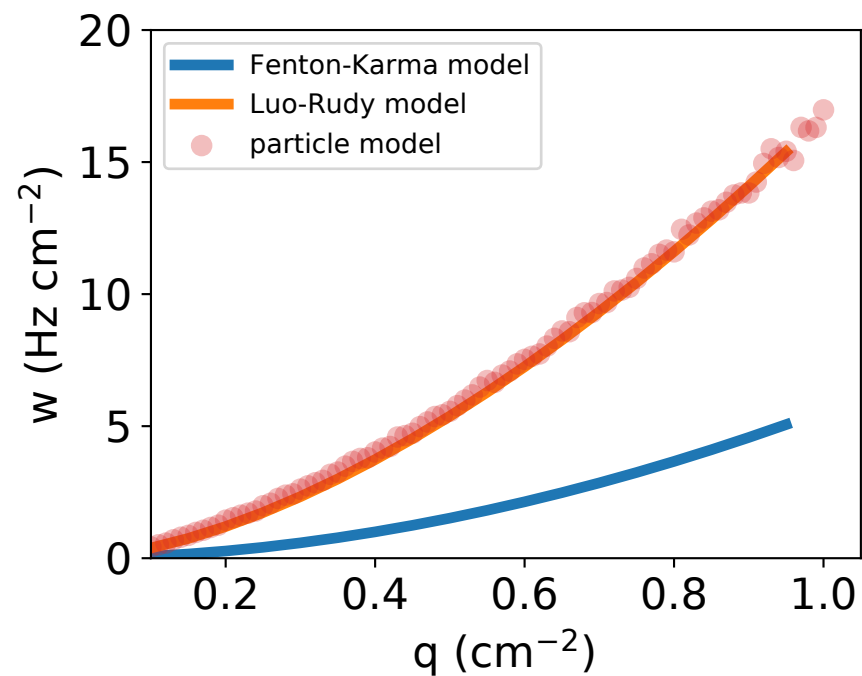
force_code=2, neighbors=0, reflect=0
 $r = 0.26028$ cm, $\kappa = 140.83700$ Hz
 $D = 0.41833$ cm²/s, $a = 11.48910$ cm²/s, $x_0 = 0$ cm



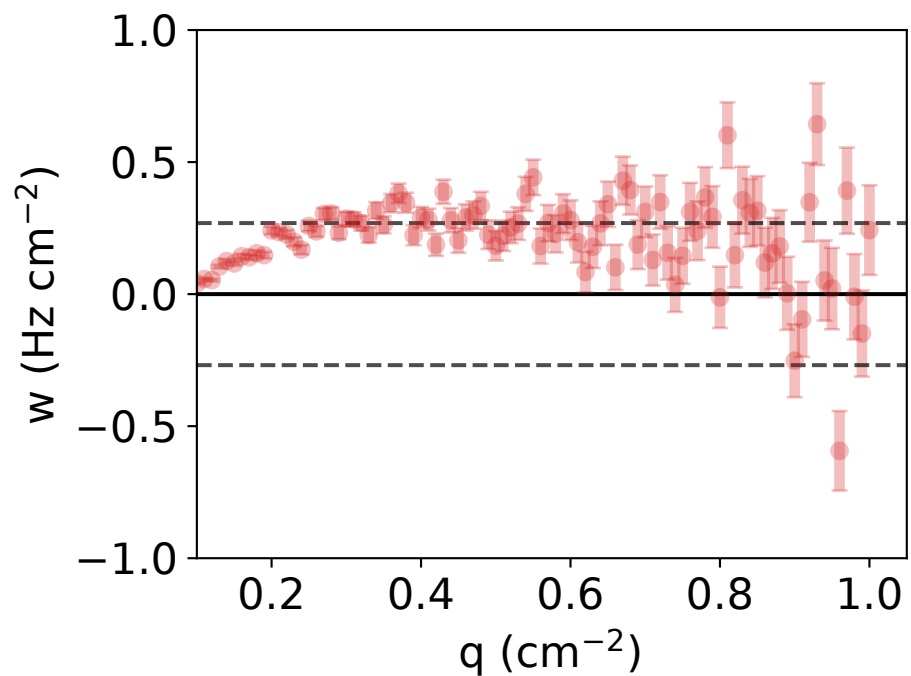
$\nu = 1.669 \pm 0.011$, $M = 17.164 \pm 0.509$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.298 Hz/cm²



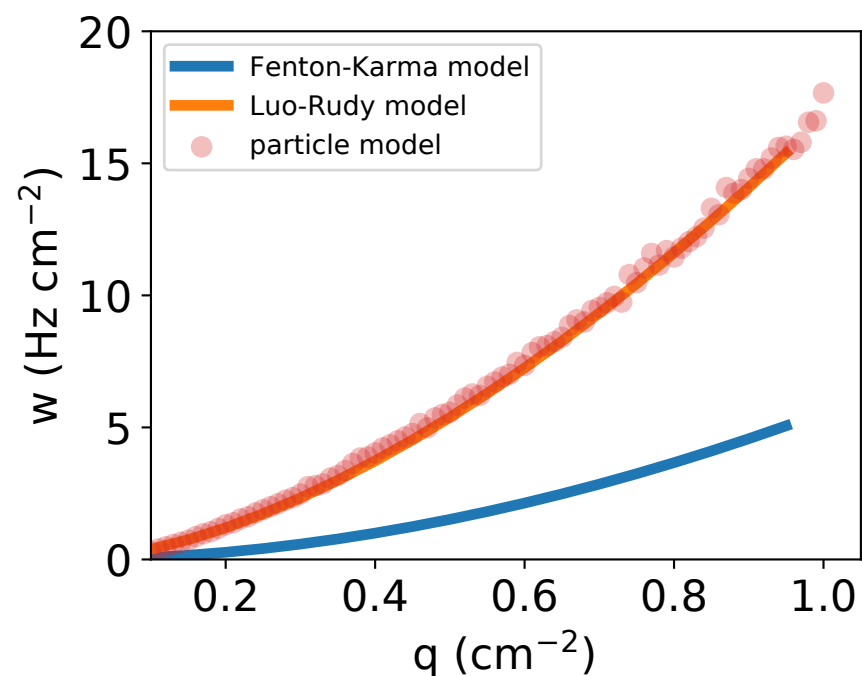
force_code=2, neighbors=0, reflect=0
 $r = 0.22701$ cm, $\kappa = 144.85700$ Hz
 $D = 0.02990$ cm²/s, $a = 20.52920$ cm²/s, $x_0 = 0$ cm



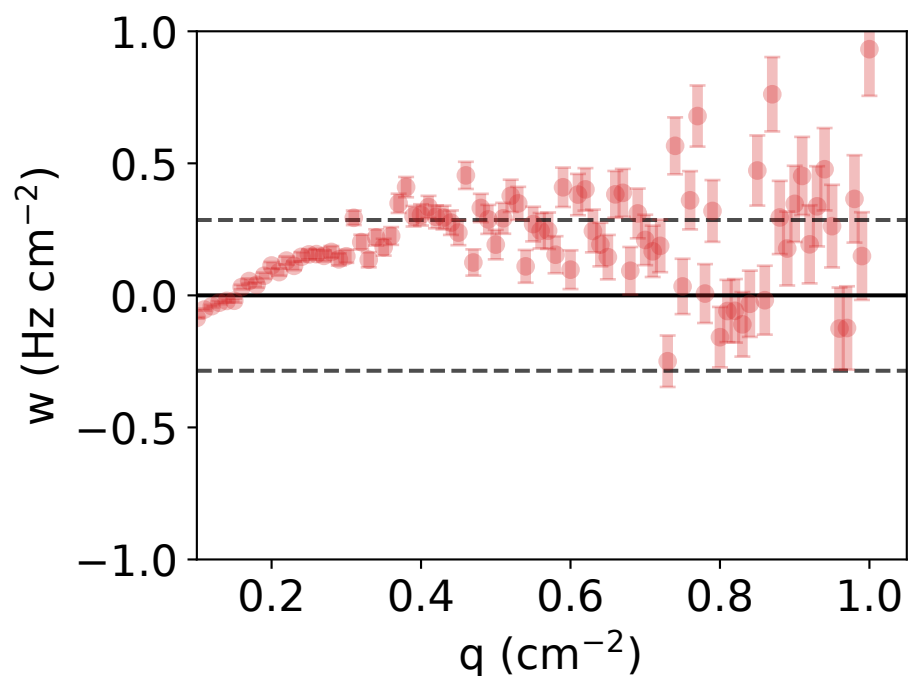
$\nu = 1.560 \pm 0.007$, $M = 16.695 \pm 0.363$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.269 Hz/cm²



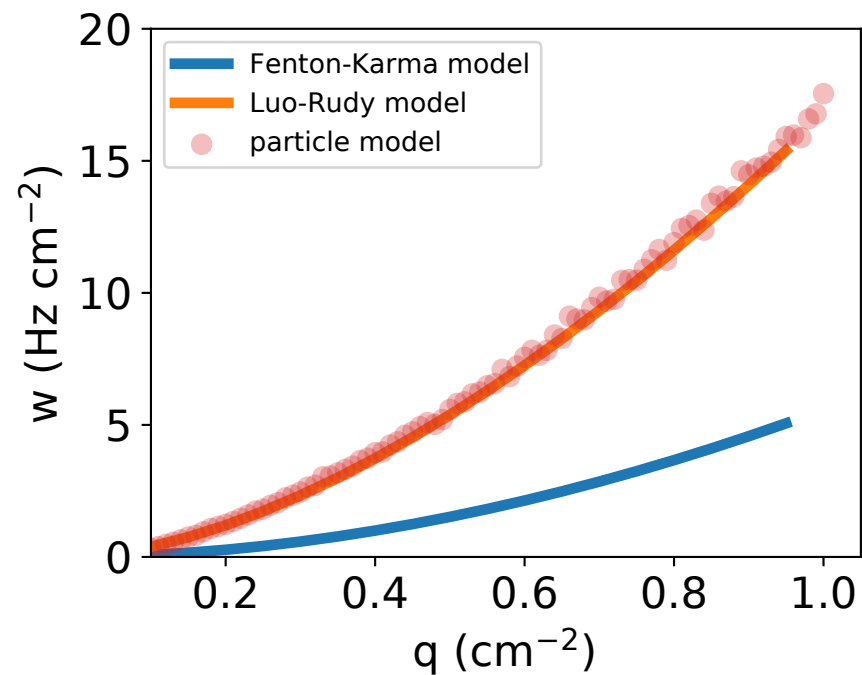
force_code=2, neighbors=0, reflect=0
 $r = 0.16058$ cm, $\kappa = 300.00000$ Hz
 $D = 0.50000$ cm²/s, $a = 9.97592$ cm²/s, $x_0 = 0$ cm



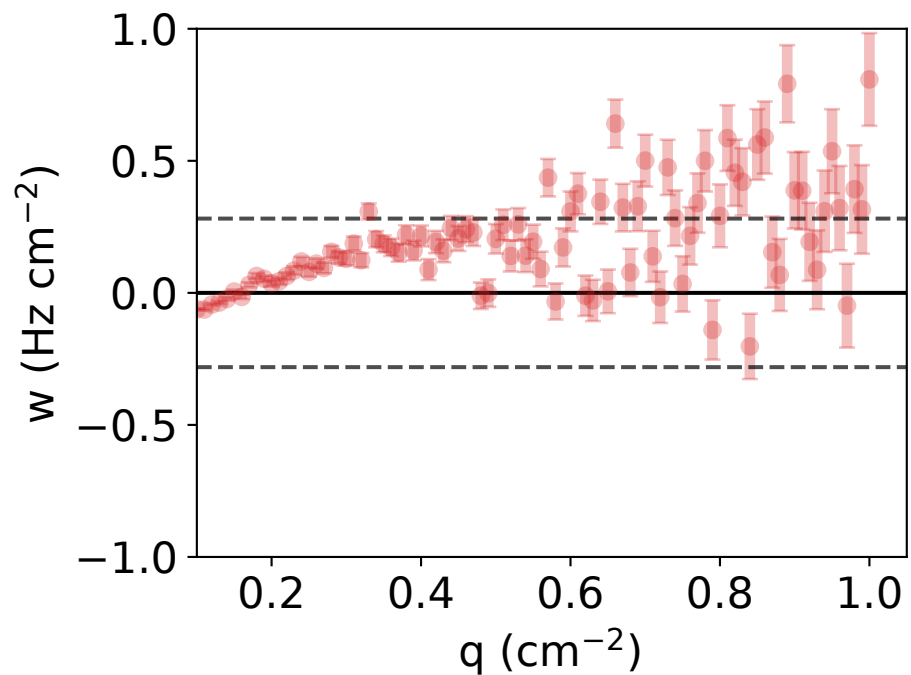
$\nu = 1.645 \pm 0.017$, $M = 16.758 \pm 0.716$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.285 Hz/cm²



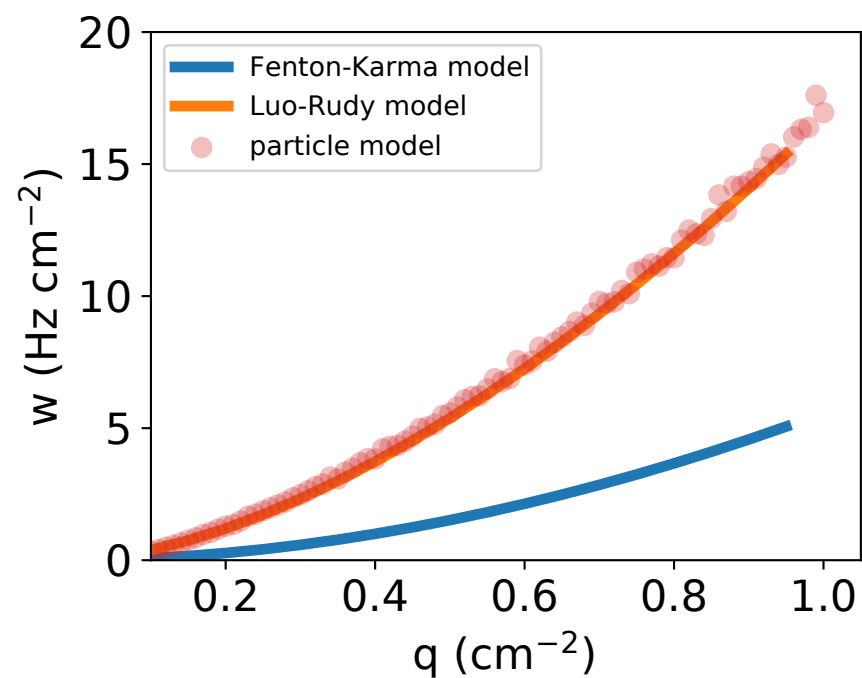
force_code=2, neighbors=0, reflect=0
 $r = 0.19133$ cm, $\kappa = 229.45600$ Hz
 $D = 0.64109$ cm²/s, $a = 10.43440$ cm²/s, $x_0 = 0$ cm



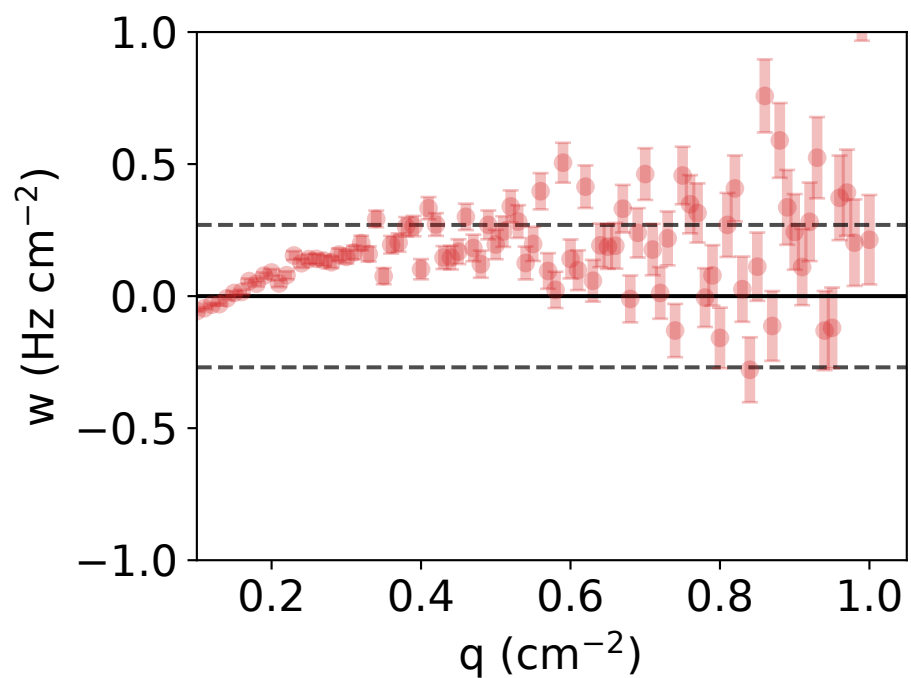
$\nu = 1.656 \pm 0.014$, $M = 16.971 \pm 0.587$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.281 Hz/cm²



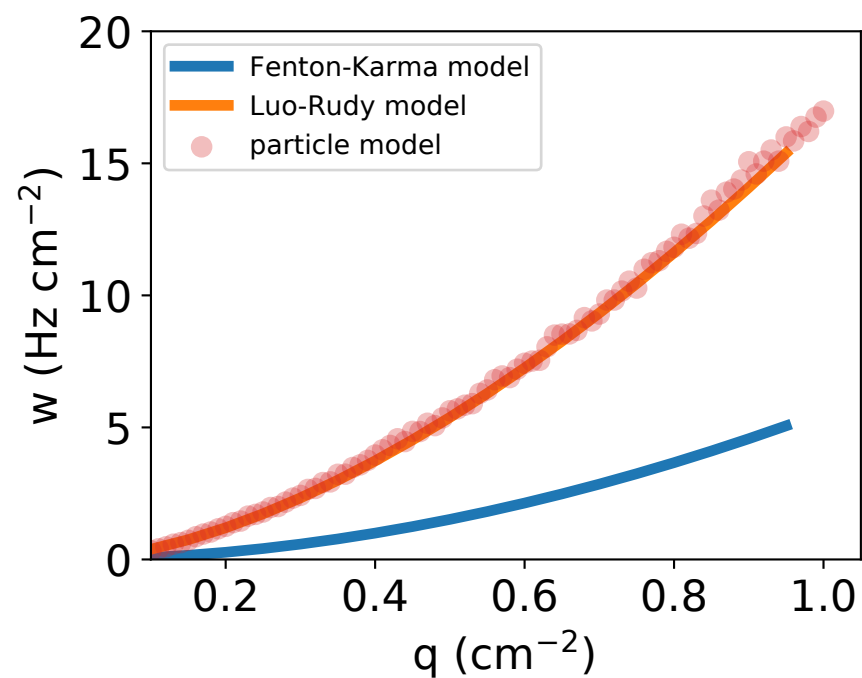
force_code=2, neighbors=0, reflect=0
 $r = 0.17998$ cm, $\kappa = 250.00000$ Hz
 $D = 0.10169$ cm²/s, $a = 10.99740$ cm²/s, $x_0 = 0$ cm



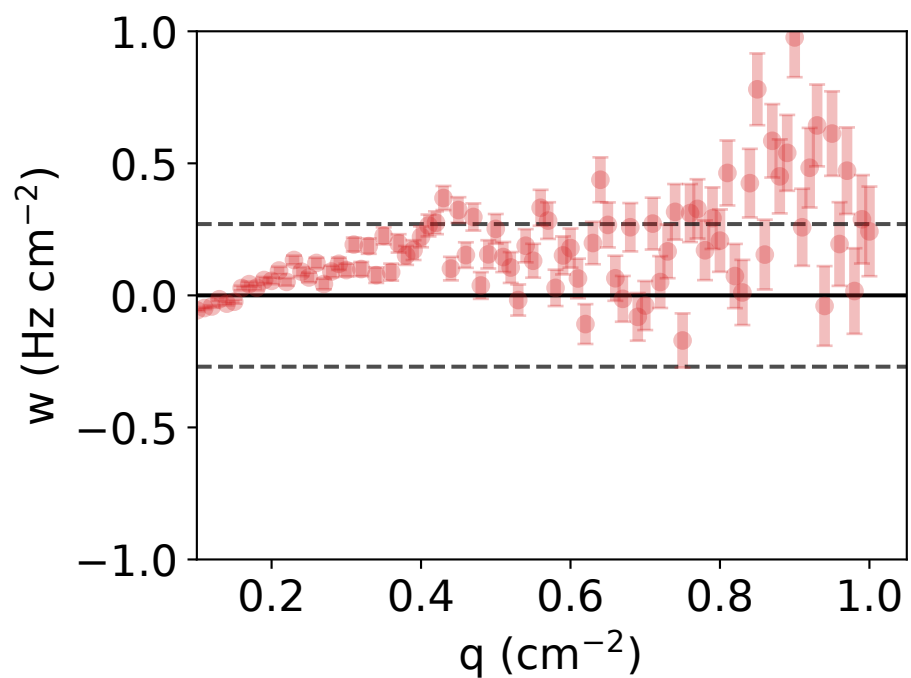
$\nu = 1.641 \pm 0.014$, $M = 16.835 \pm 0.593$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.270 Hz/cm²



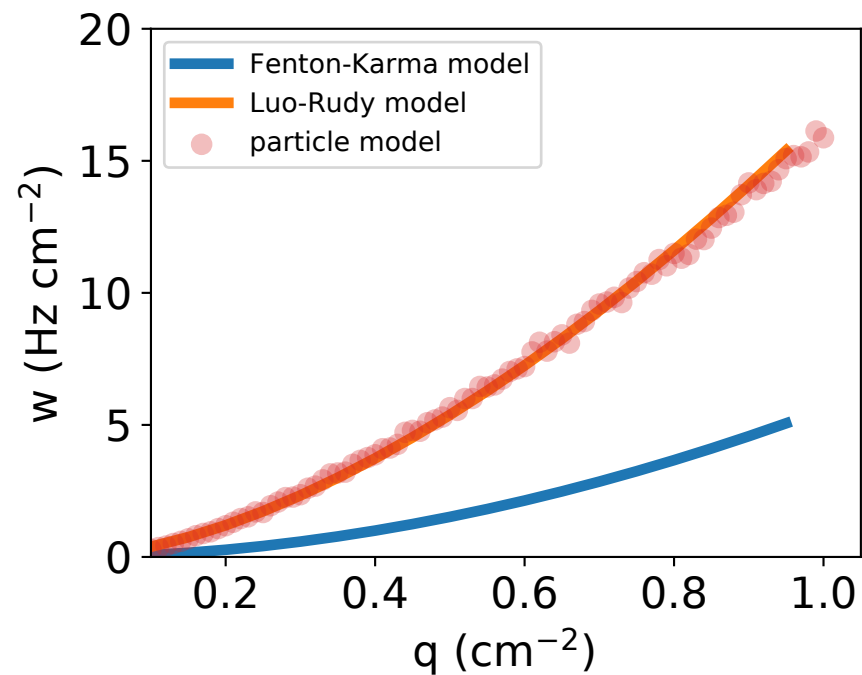
force_code=2, neighbors=0, reflect=0
 $r = 0.20675$ cm, $\kappa = 200.56800$ Hz
 $D = 0.59432$ cm²/s, $a = 10.99250$ cm²/s, $x_0 = 0$ cm



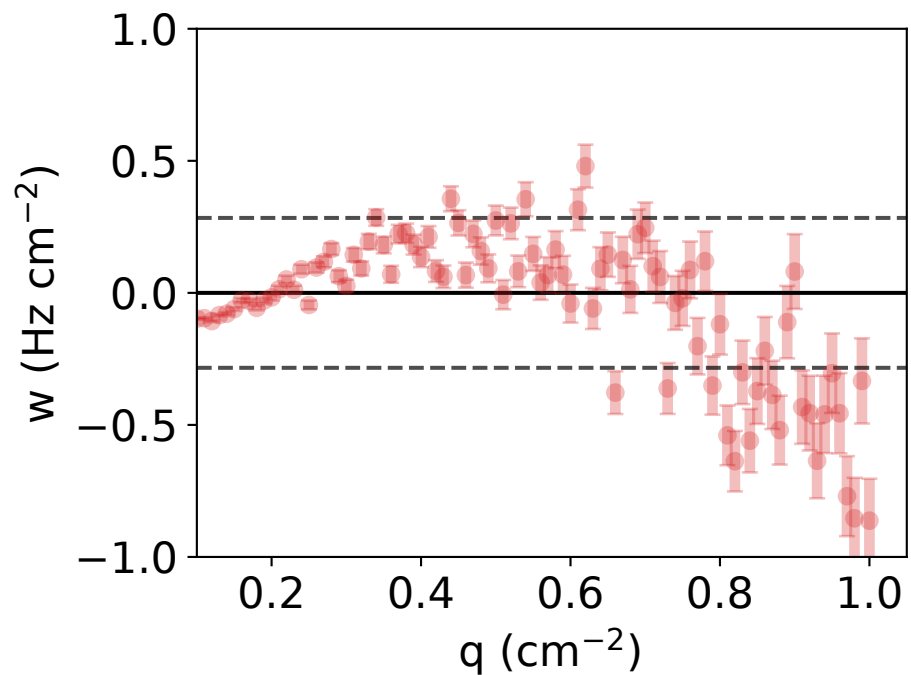
$\nu = 1.652 \pm 0.013$, $M = 16.977 \pm 0.550$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.270 Hz/cm²



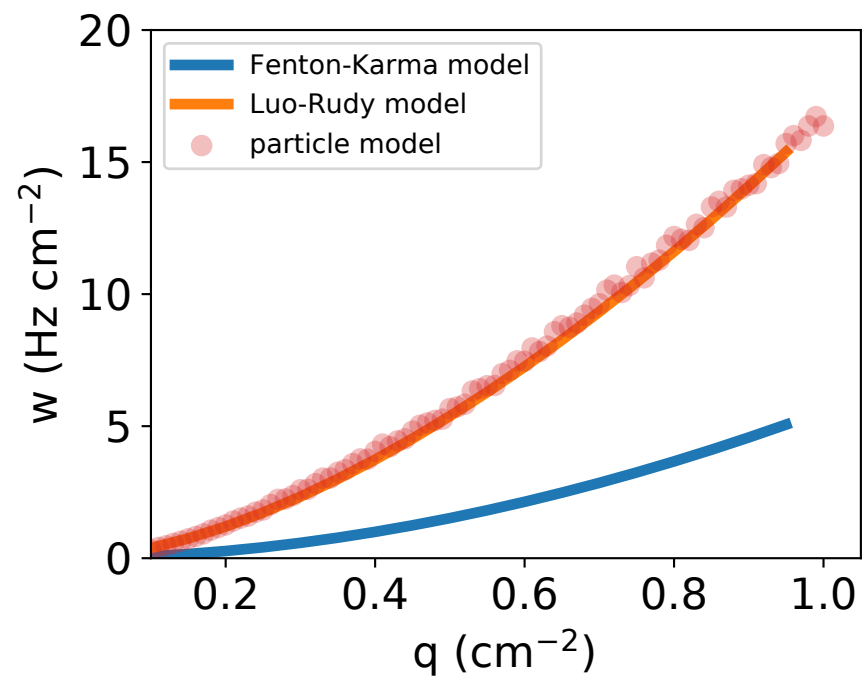
force_code=2, neighbors=0, reflect=0
 $r=0.11974$ cm, $\kappa=453.72200$ Hz
 $D=0.57686$ cm²/s, $a=8.30334$ cm²/s, $x_0=0$ cm



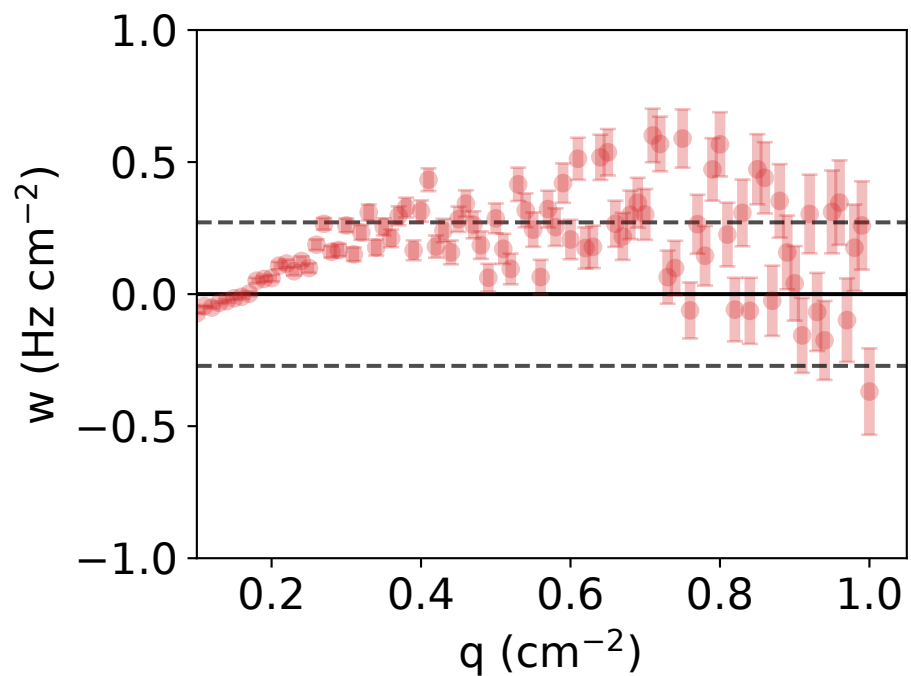
$\nu=1.668\pm0.021$, $M=15.972\pm0.852$ cm²($\nu-1$)/s
RMSE_{particle vs full} = 0.284 Hz/cm²



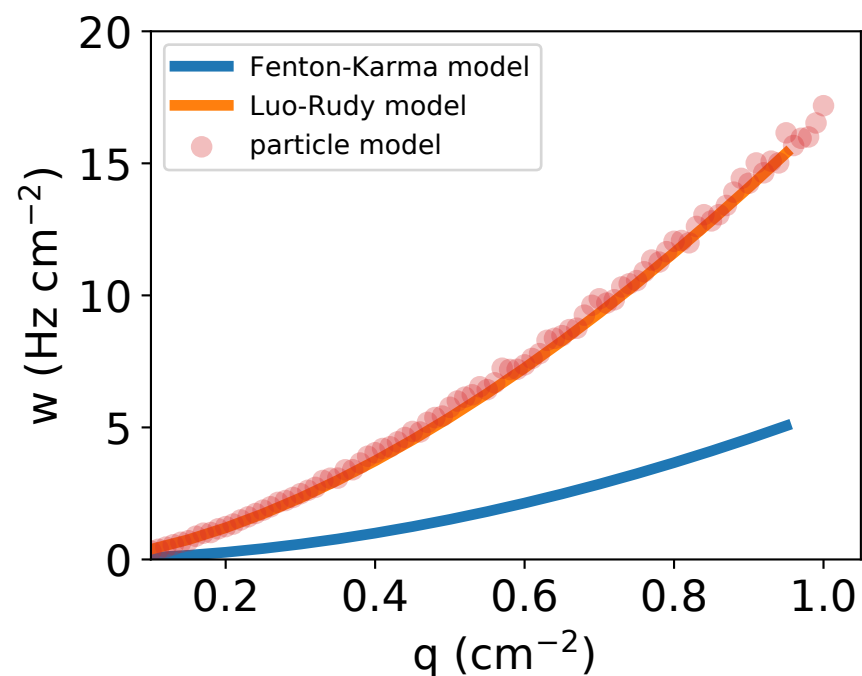
force_code=2, neighbors=0, reflect=0
 $r=0.16002$ cm, $\kappa=300.00000$ Hz
 $D=0.61016$ cm²/s, $a=9.91674$ cm²/s, $x_0=0$ cm



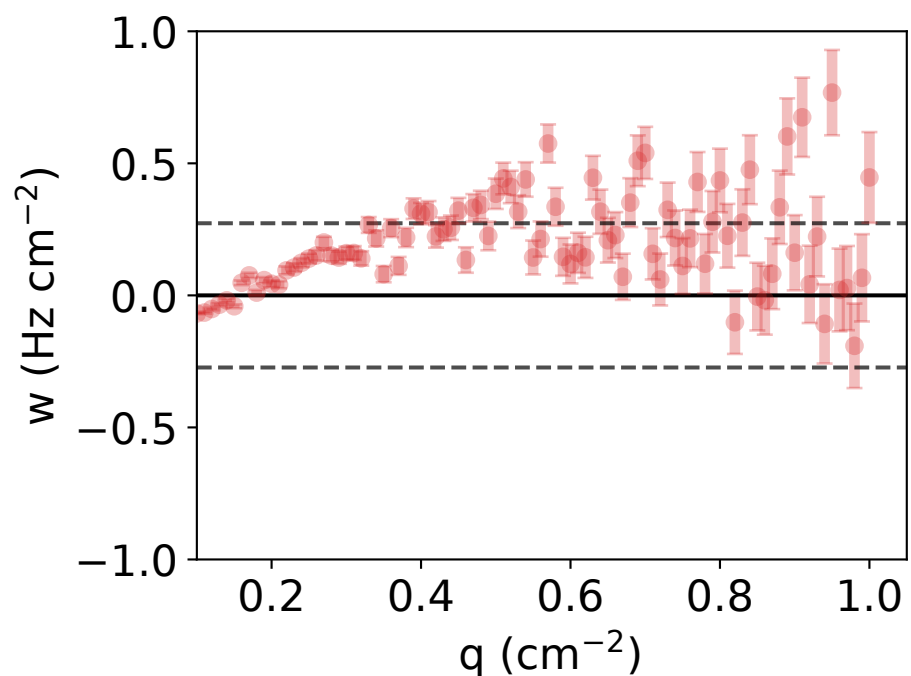
$\nu=1.647\pm0.016$, $M=16.684\pm0.691$ cm²($\nu-1$)/s
RMSE_{particle vs full} = 0.272 Hz/cm²



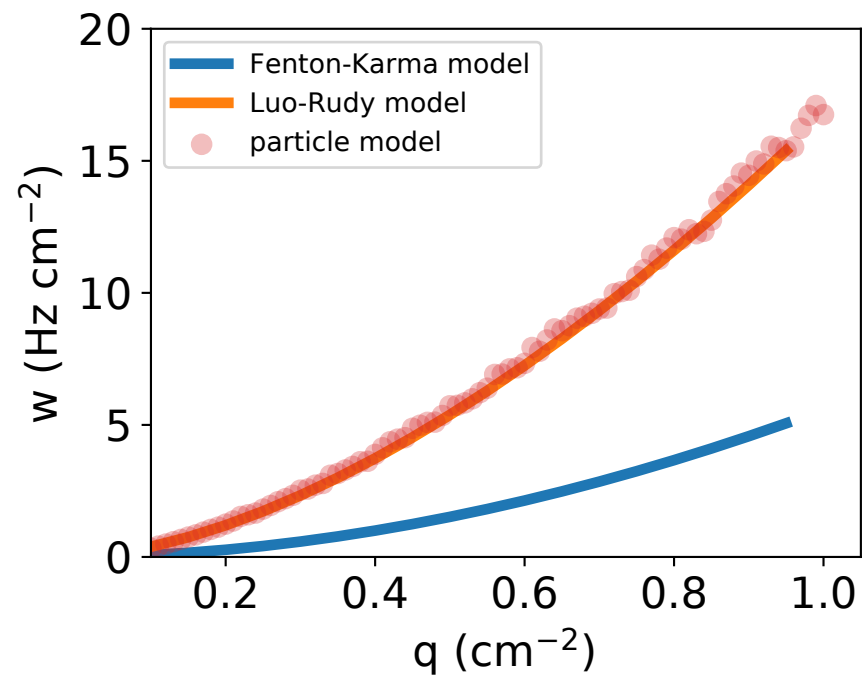
force_code=2, neighbors=0, reflect=0
 $r=0.16310$ cm, $\kappa=295.18200$ Hz
 $D=0.59036$ cm²/s, $a=9.88581$ cm²/s, $x_0=0$ cm



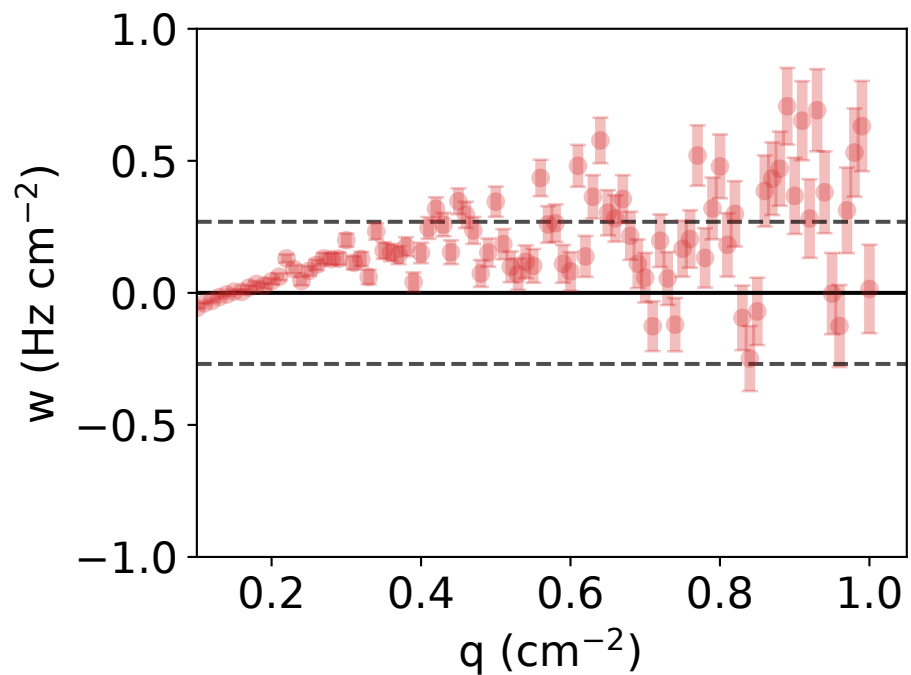
$\nu=1.652\pm0.016$, $M=16.763\pm0.668$ cm²($\nu-1$)/s
RMSE_{particle vs full} = 0.273 Hz/cm²



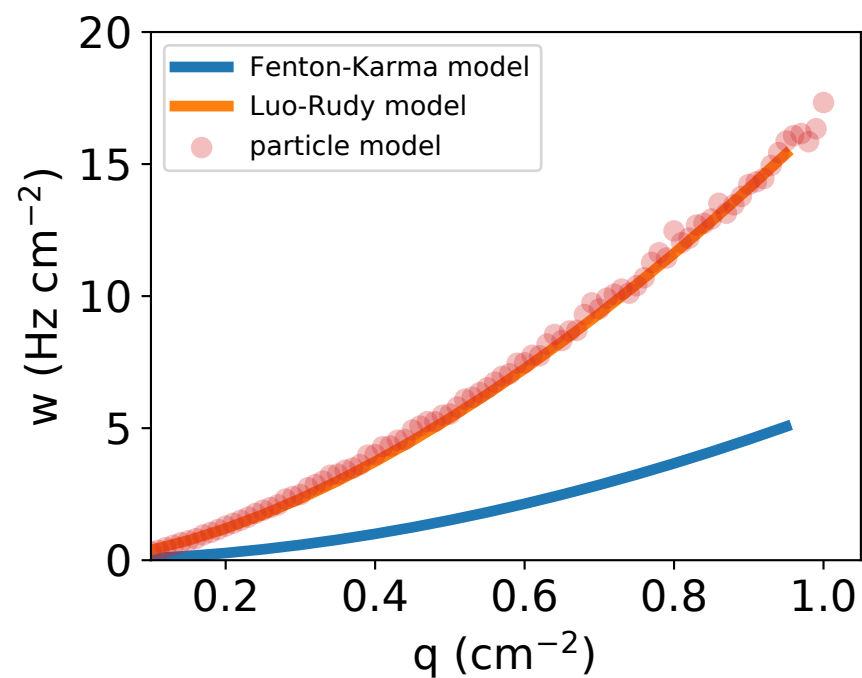
force_code=2, neighbors=0, reflect=0
 $r = 0.20705$ cm, $\kappa = 200.00000$ Hz
 $D = 0.60000$ cm²/s, $a = 10.99060$ cm²/s, $x_0 = 0$ cm



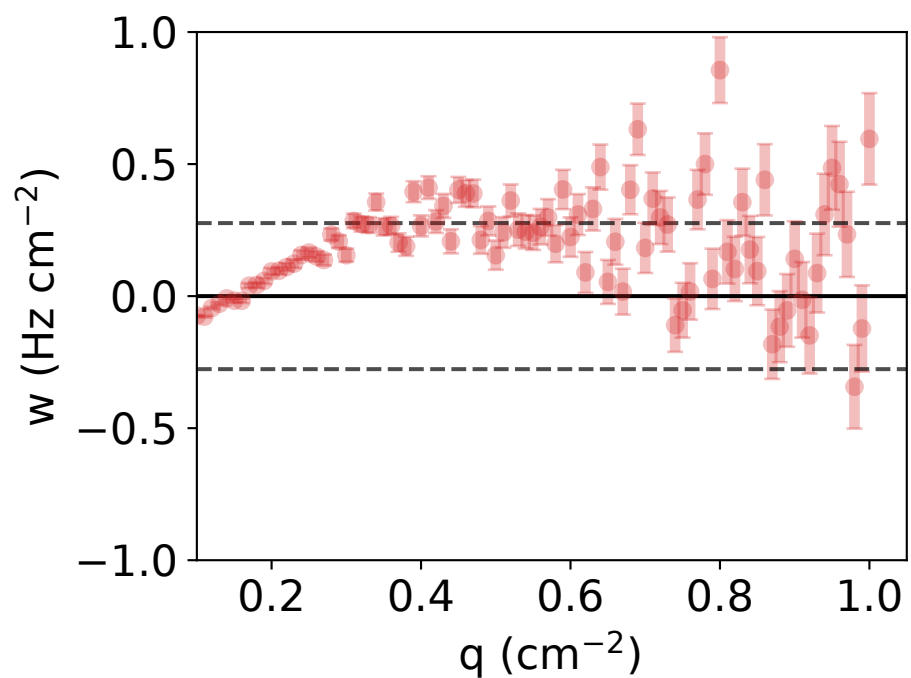
$\nu = 1.649 \pm 0.012$, $M = 16.926 \pm 0.535$ cm²($\nu - 1$)/s
 $RMSE_{particle\ vs\ full} = 0.269$ Hz/cm²



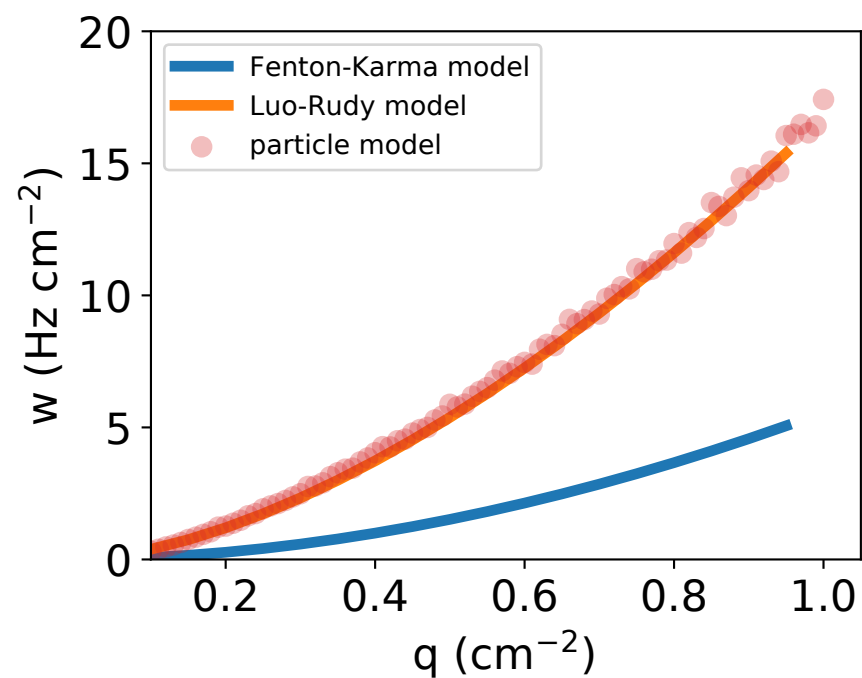
force_code=2, neighbors=0, reflect=0
 $r = 0.13255$ cm, $\kappa = 400.00000$ Hz
 $D = 0.46522$ cm²/s, $a = 9.39950$ cm²/s, $x_0 = 0$ cm



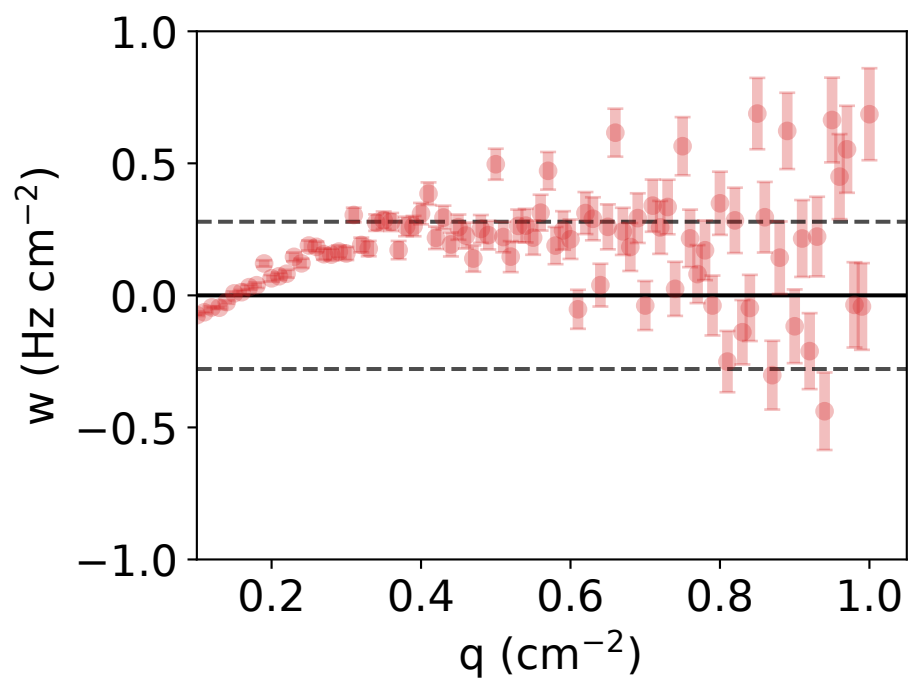
$\nu = 1.646 \pm 0.018$, $M = 16.641 \pm 0.747$ cm²($\nu - 1$)/s
 $RMSE_{particle\ vs\ full} = 0.277$ Hz/cm²



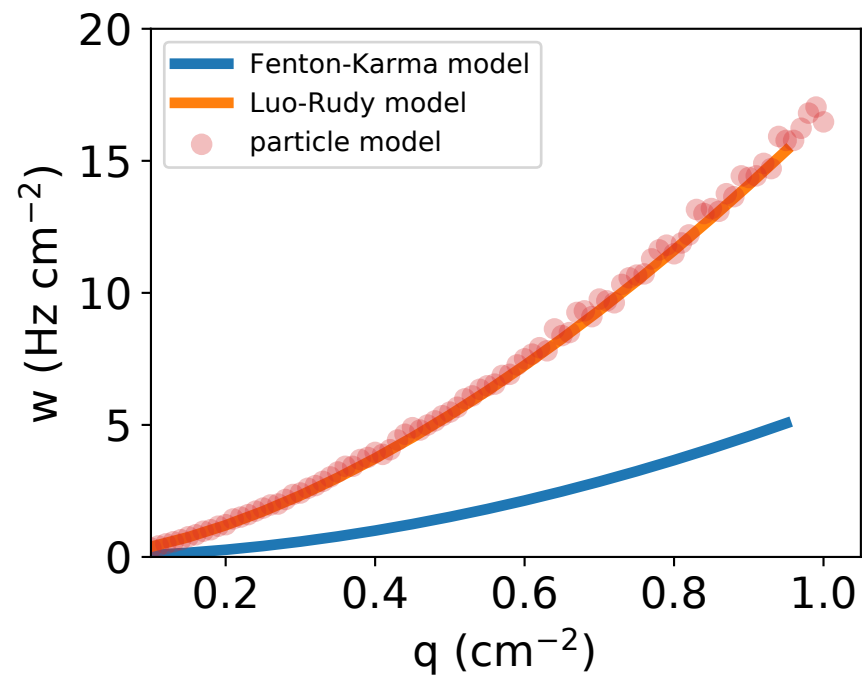
force_code=2, neighbors=0, reflect=0
 $r = 0.16099$ cm, $\kappa = 300.00000$ Hz
 $D = 0.51857$ cm²/s, $a = 9.94210$ cm²/s, $x_0 = 0$ cm



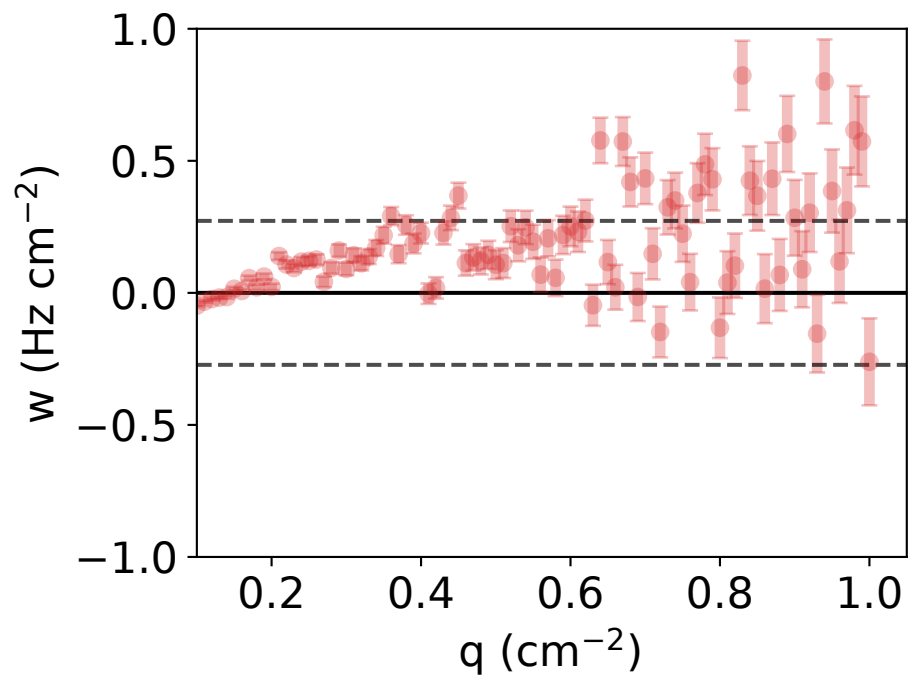
$\nu = 1.645 \pm 0.017$, $M = 16.690 \pm 0.725$ cm²($\nu - 1$)/s
 $RMSE_{particle\ vs\ full} = 0.279$ Hz/cm²



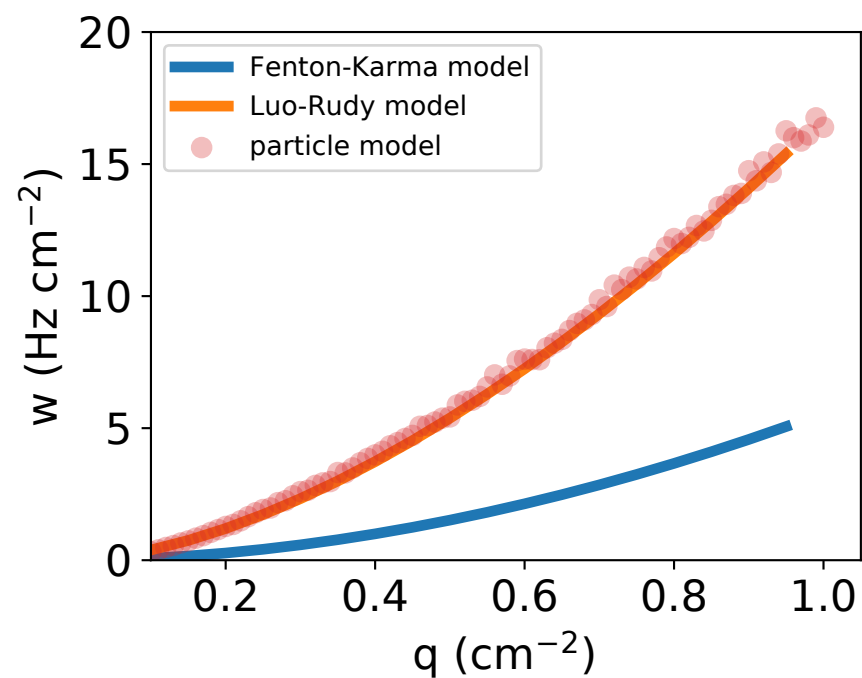
force_code=2, neighbors=0, reflect=0
 $r = 0.20684$ cm, $\kappa = 200.00000$ Hz
 $D = 0.31999$ cm²/s, $a = 11.27110$ cm²/s, $x_0 = 0$ cm



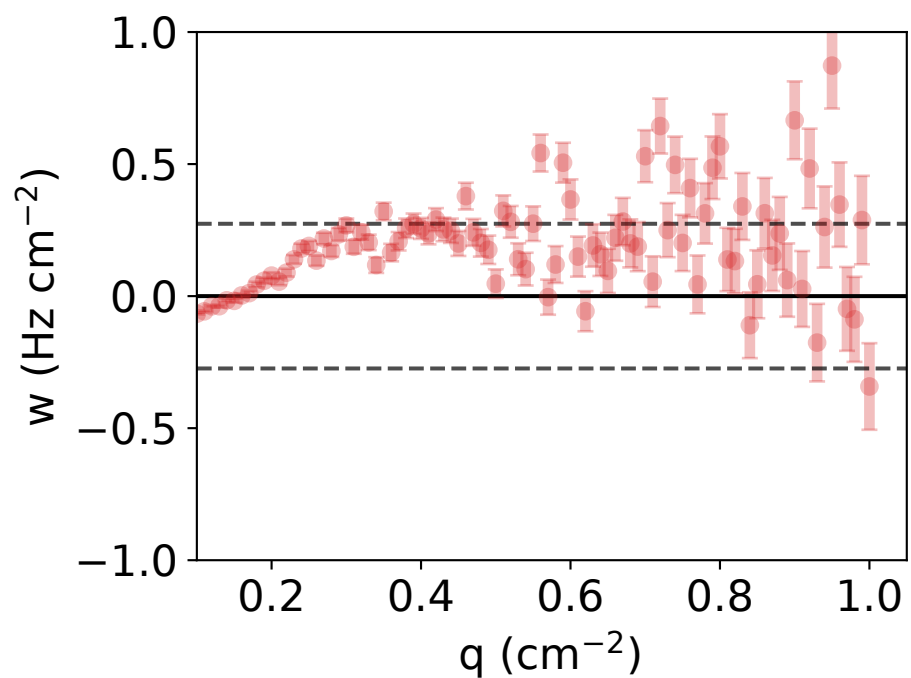
$\nu = 1.643 \pm 0.012$, $M = 16.937 \pm 0.534$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.273 Hz/cm²



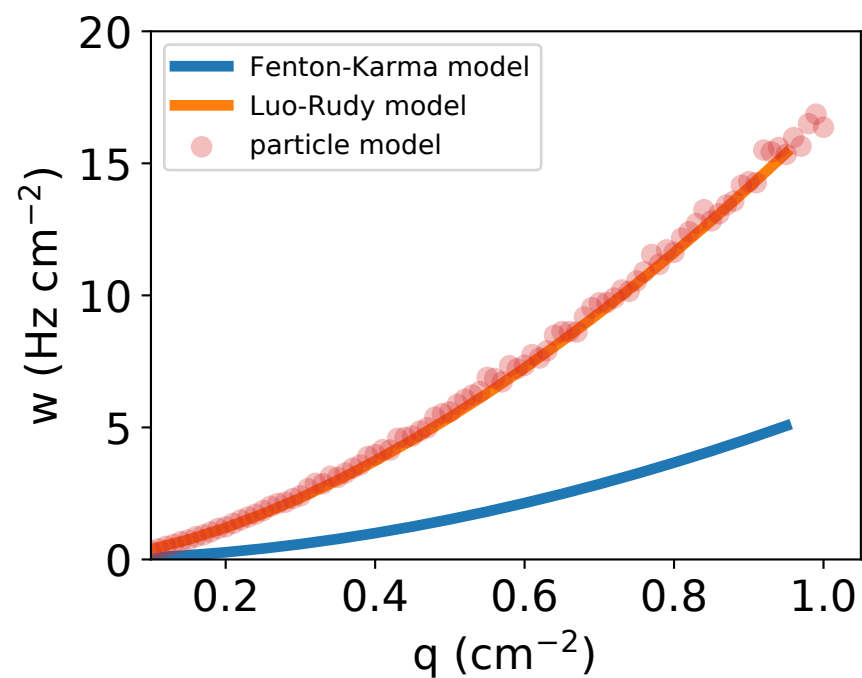
force_code=2, neighbors=0, reflect=0
 $r = 0.15995$ cm, $\kappa = 300.00000$ Hz
 $D = 0.62390$ cm²/s, $a = 9.90935$ cm²/s, $x_0 = 0$ cm



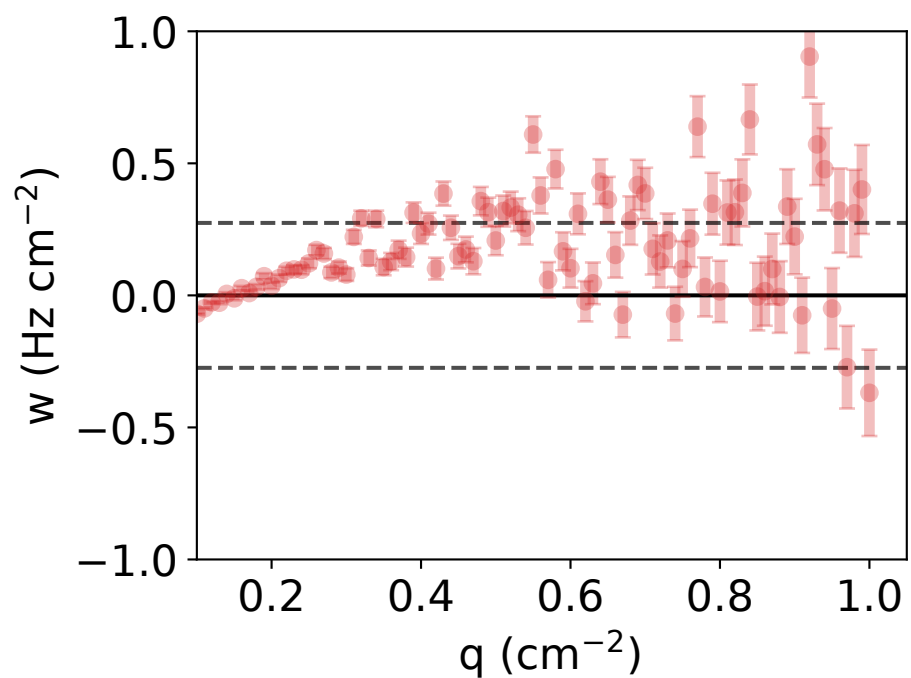
$\nu = 1.646 \pm 0.016$, $M = 16.753 \pm 0.674$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.274 Hz/cm²



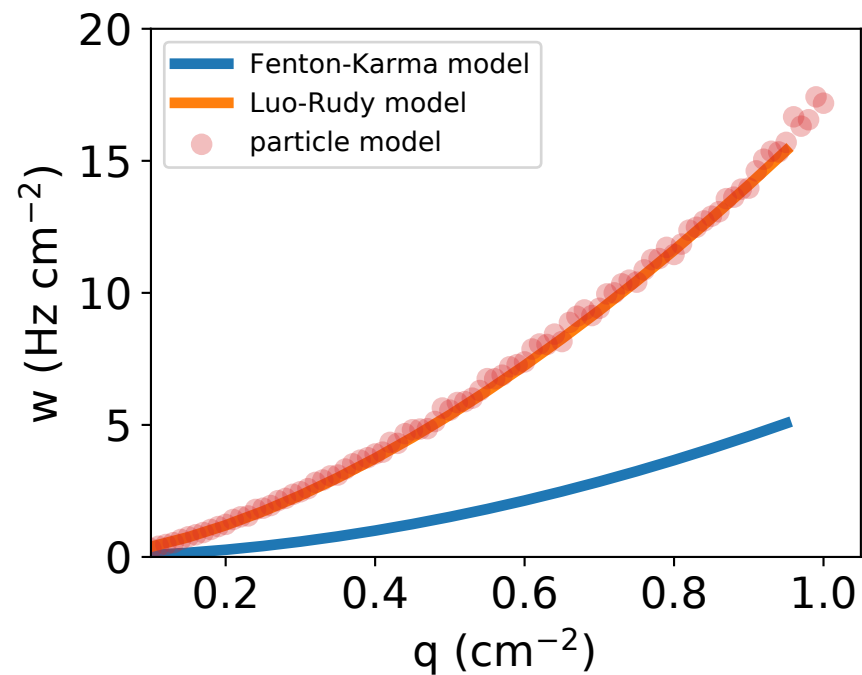
force_code=2, neighbors=0, reflect=0
 $r = 0.18710$ cm, $\kappa = 234.92100$ Hz
 $D = 0.57937$ cm²/s, $a = 10.60950$ cm²/s, $x_0 = 0$ cm



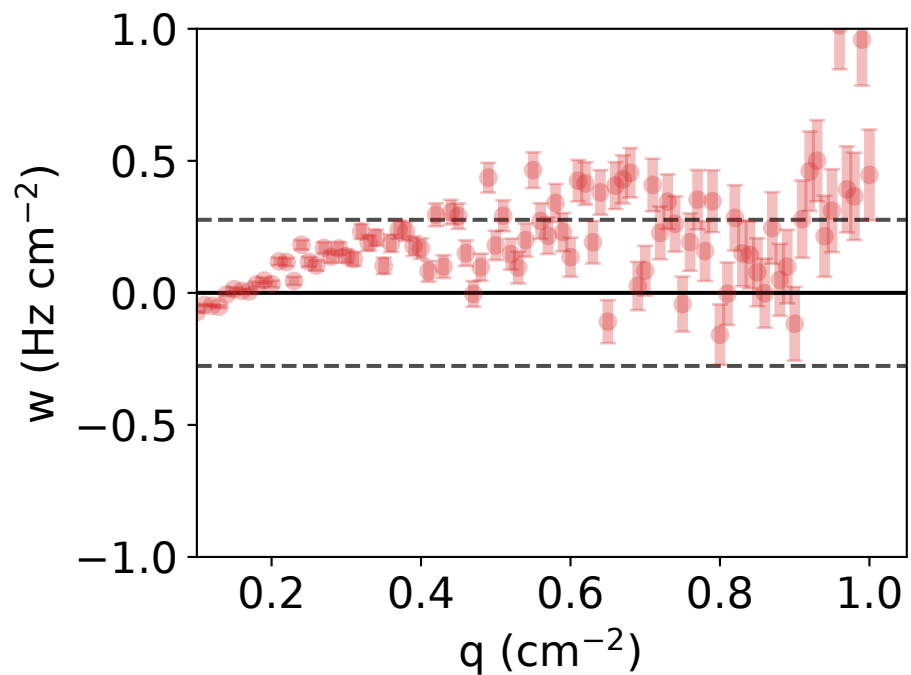
$\nu = 1.647 \pm 0.014$, $M = 16.790 \pm 0.629$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.274 Hz/cm²



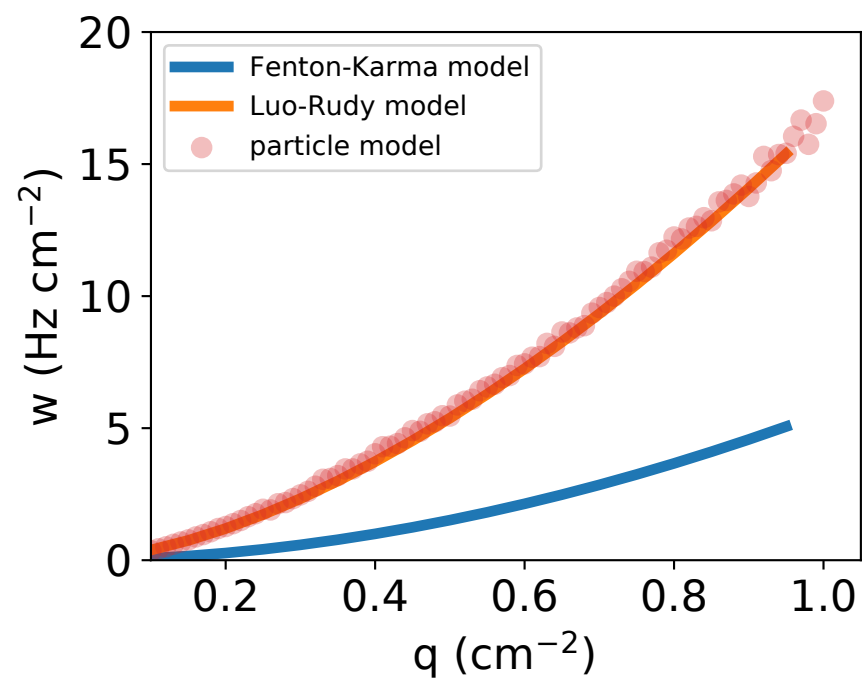
force_code=2, neighbors=0, reflect=0
 $r = 0.18045$ cm, $\kappa = 250.00000$ Hz
 $D = 0.42971$ cm²/s, $a = 10.44500$ cm²/s, $x_0 = 0$ cm



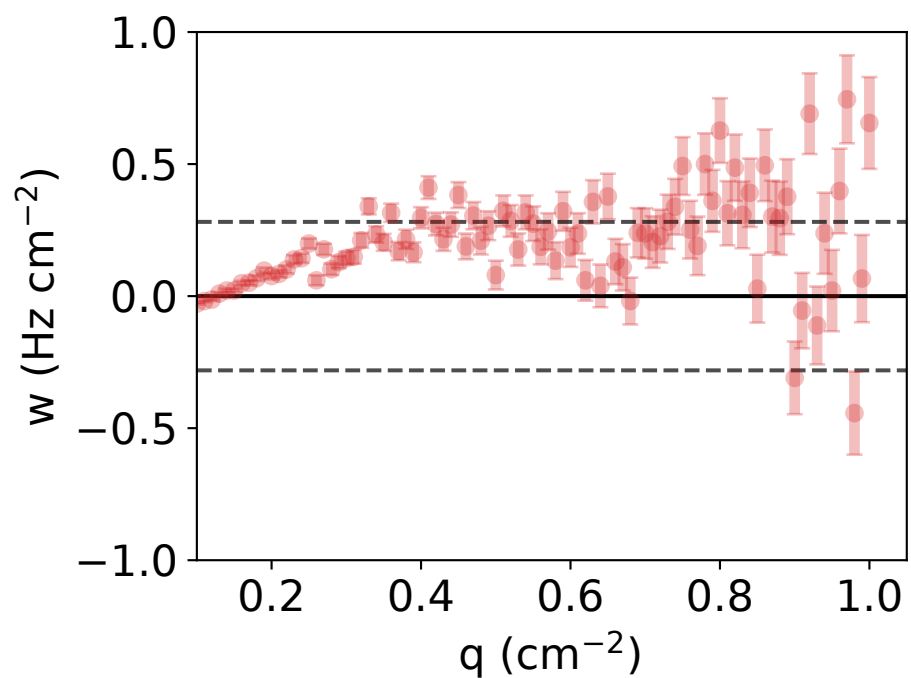
$\nu = 1.653 \pm 0.015$, $M = 16.904 \pm 0.622$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.277 Hz/cm²



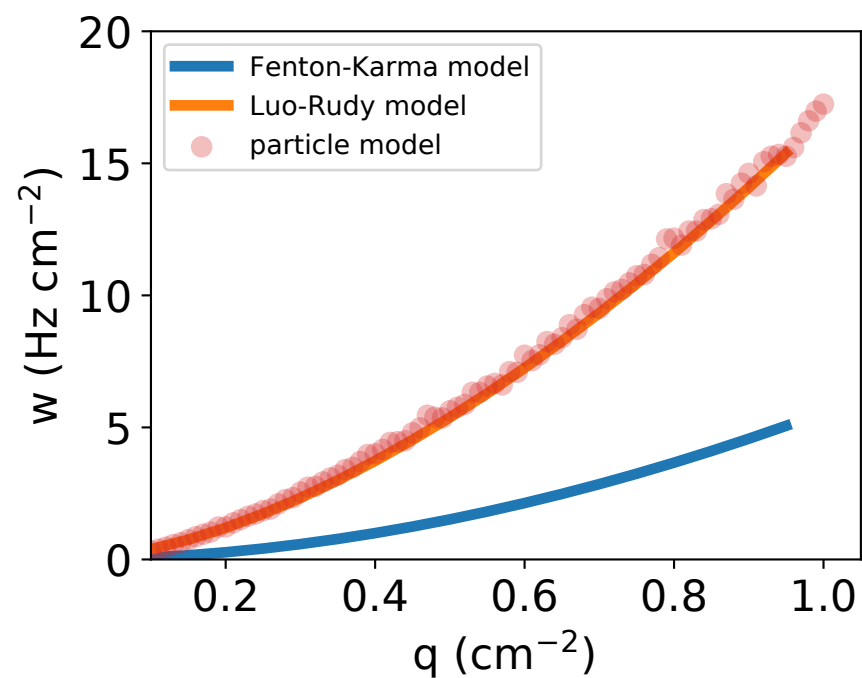
force_code=2, neighbors=0, reflect=0
 $r = 0.14807$ cm, $\kappa = 306.68800$ Hz
 $D = 0.00223$ cm²/s, $a = 17.93380$ cm²/s, $x_0 = 0$ cm



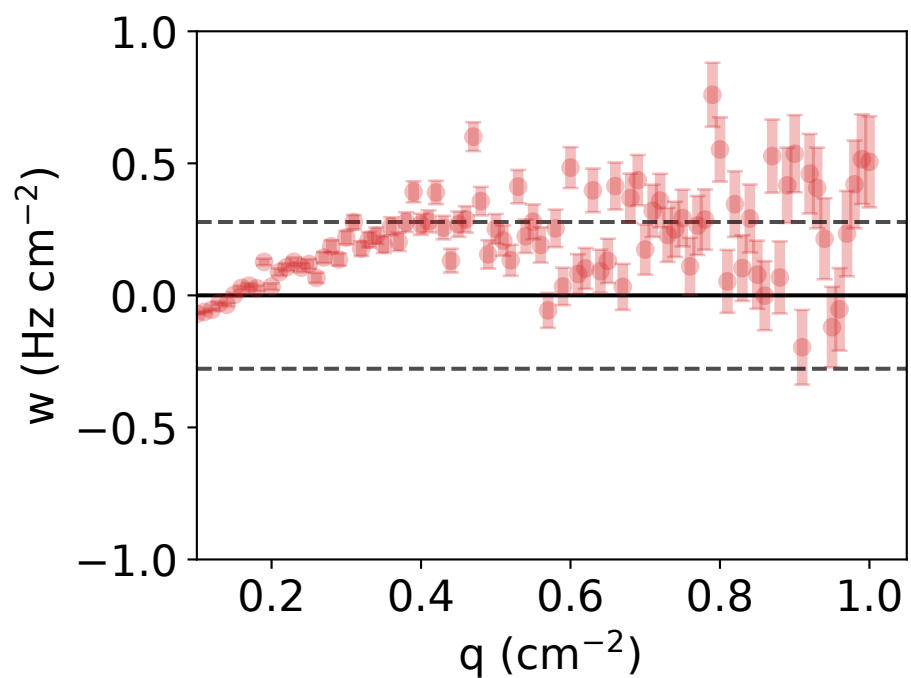
$\nu = 1.626 \pm 0.011$, $M = 16.863 \pm 0.496$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.281 Hz/cm²



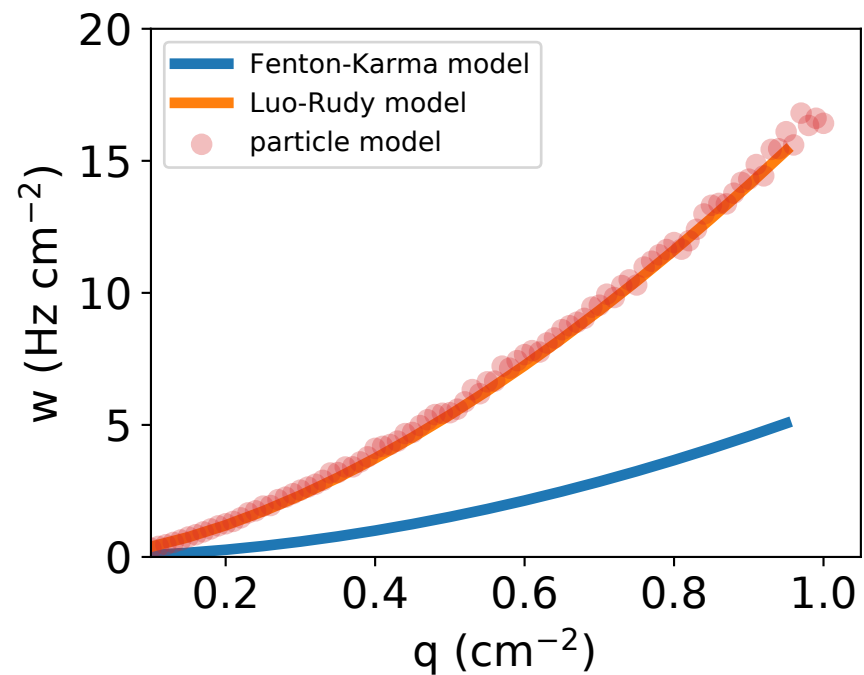
force_code=2, neighbors=0, reflect=0
 $r = 0.16660$ cm, $\kappa = 285.28100$ Hz
 $D = 0.72944$ cm²/s, $a = 9.92050$ cm²/s, $x_0 = 0$ cm



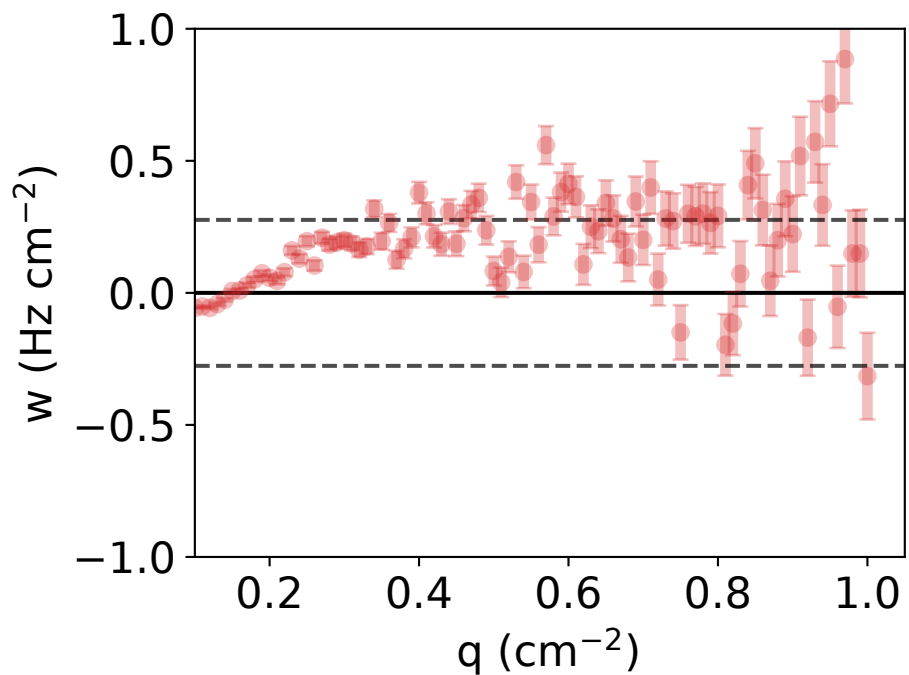
$\nu = 1.650 \pm 0.016$, $M = 16.819 \pm 0.676$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.278 Hz/cm²



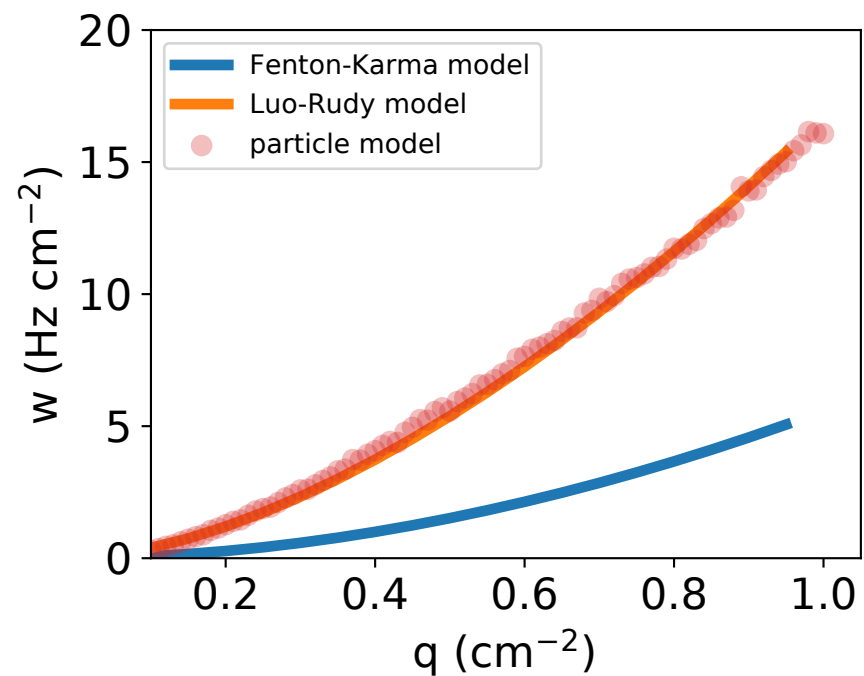
force_code=2, neighbors=0, reflect=0
 $r = 0.15956$ cm, $\kappa = 300.00000$ Hz
 $D = 0.77276$ cm²/s, $a = 9.82413$ cm²/s, $x_0 = 0$ cm



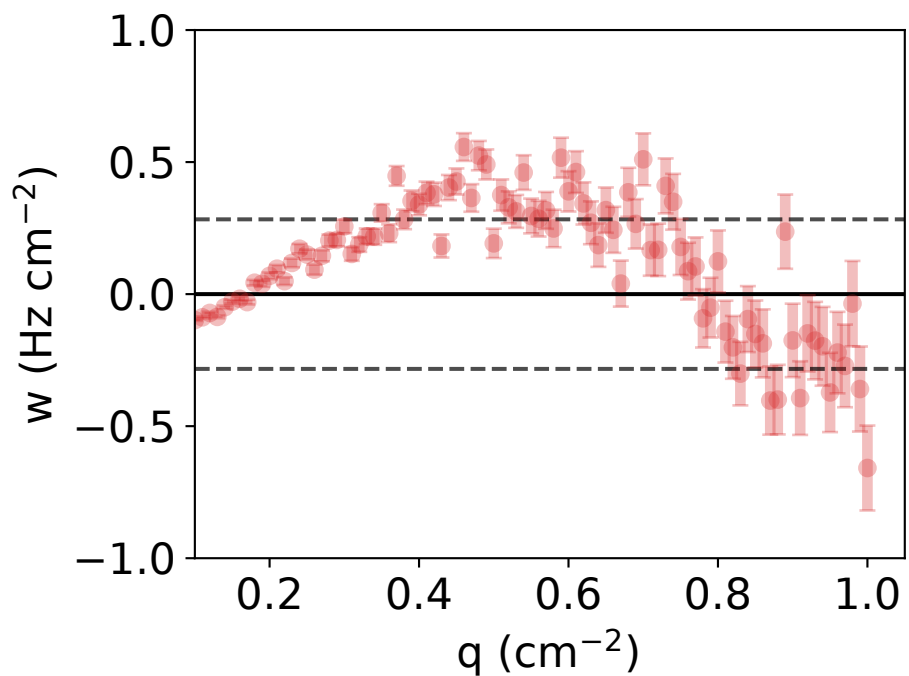
$\nu = 1.647 \pm 0.015$, $M = 16.792 \pm 0.647$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.276 Hz/cm²



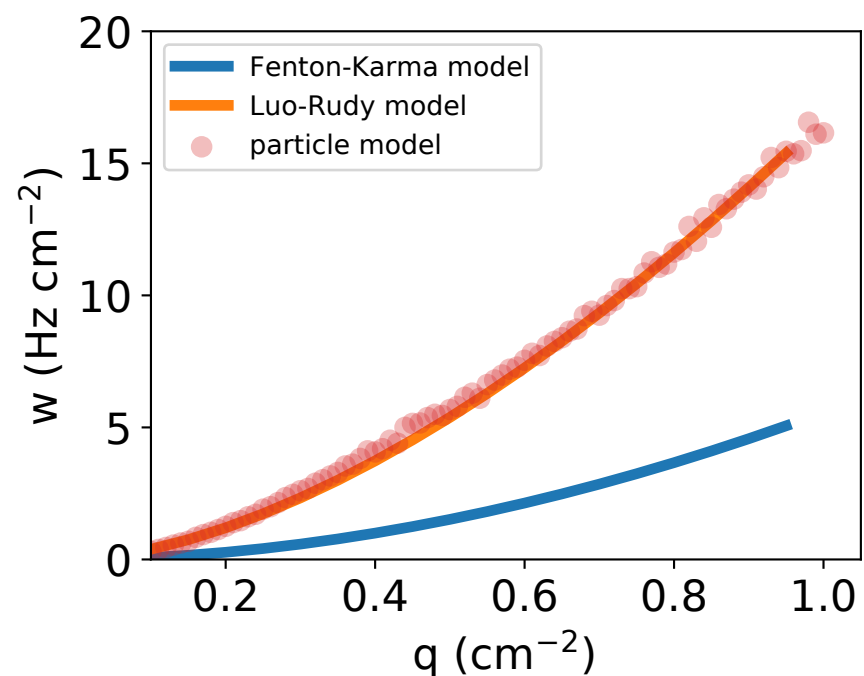
force_code=2, neighbors=0, reflect=0
 $r = 0.09676$ cm, $\kappa = 584.75500$ Hz
 $D = 0.77459$ cm²/s, $a = 8.56432$ cm²/s, $x_0 = 0$ cm



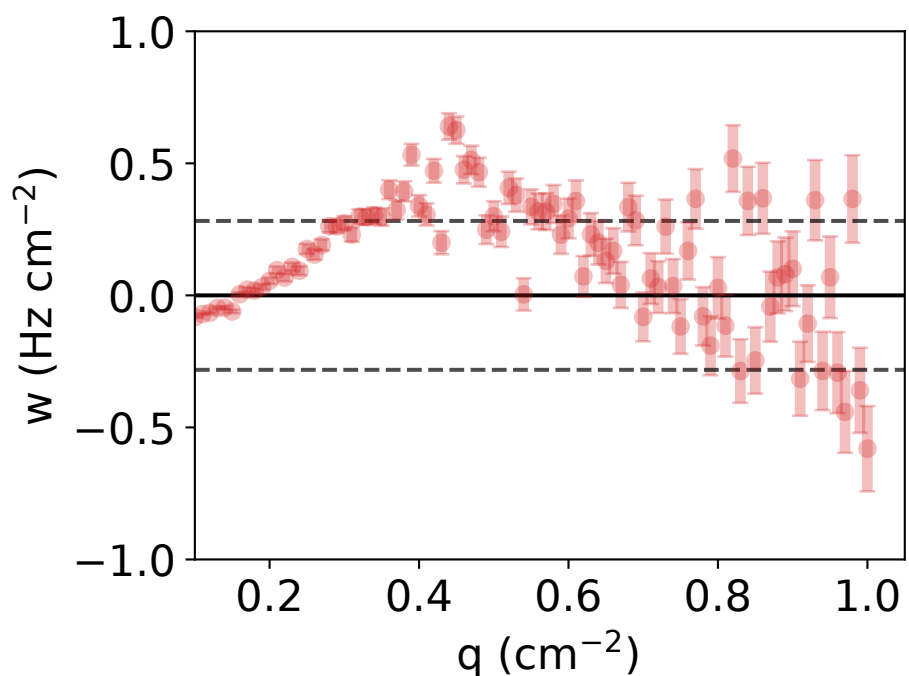
$\nu = 1.655 \pm 0.023$, $M = 16.170 \pm 0.933$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.283 Hz/cm²



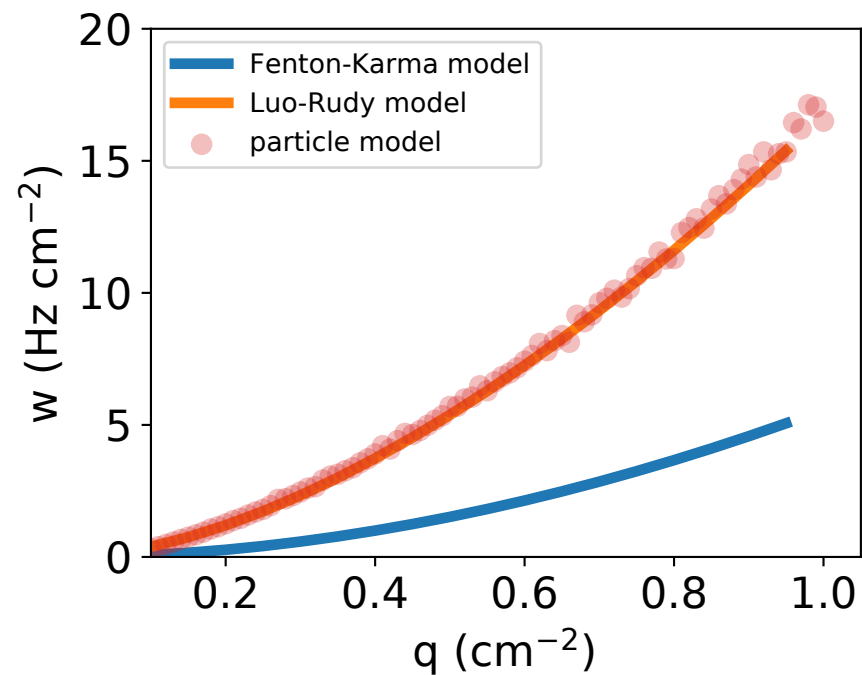
force_code=2, neighbors=0, reflect=0
 $r = 0.11129$ cm, $\kappa = 493.73300$ Hz
 $D = 0.59060$ cm²/s, $a = 8.93041$ cm²/s, $x_0 = 0$ cm



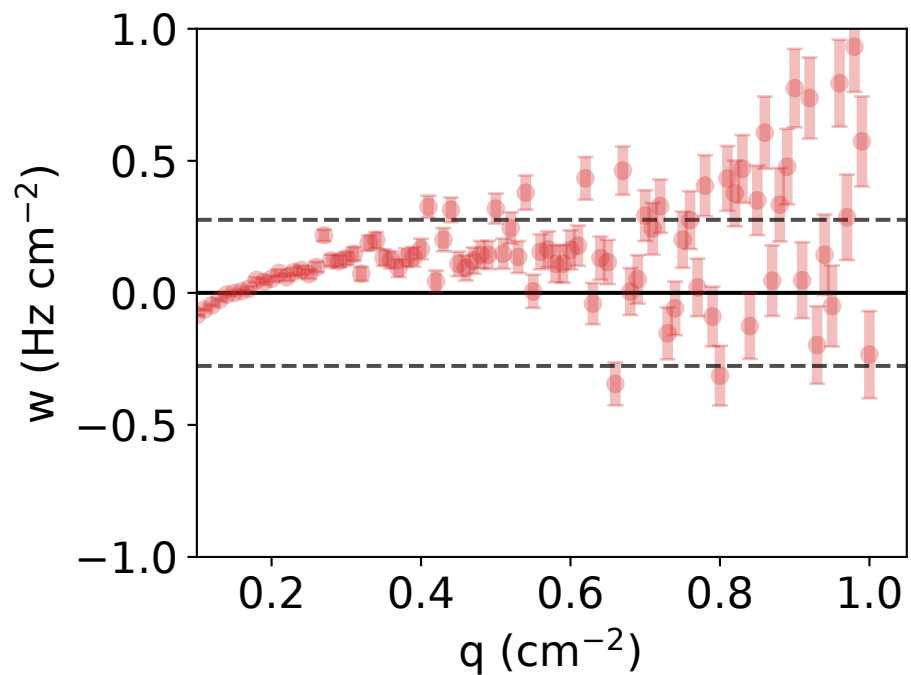
$\nu = 1.646 \pm 0.022$, $M = 16.287 \pm 0.902$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.282 Hz/cm²



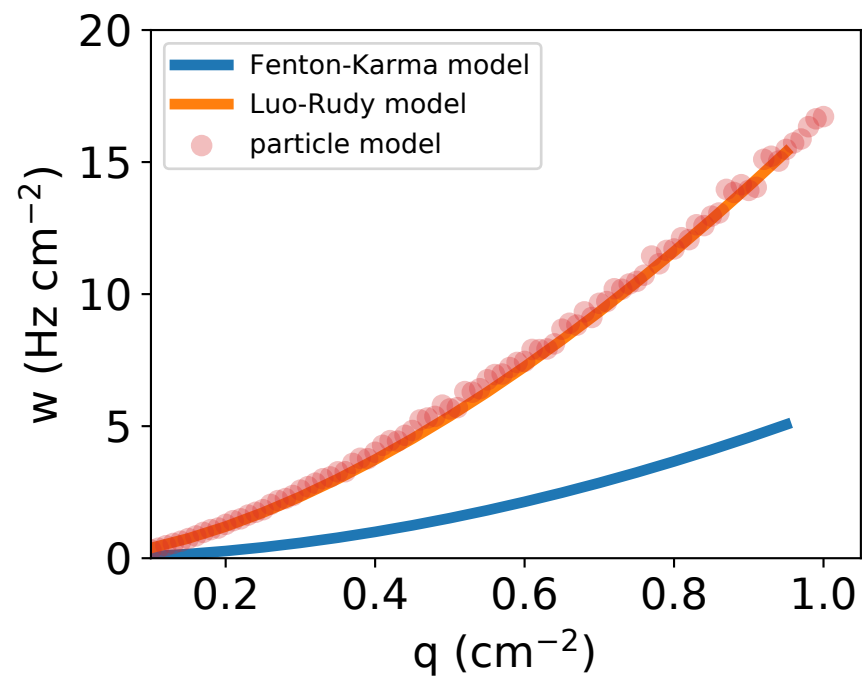
force_code=2, neighbors=0, reflect=0
 $r = 0.19258$ cm, $\kappa = 225.70200$ Hz
 $D = 0.60281$ cm²/s, $a = 10.47250$ cm²/s, $x_0 = 0$ cm



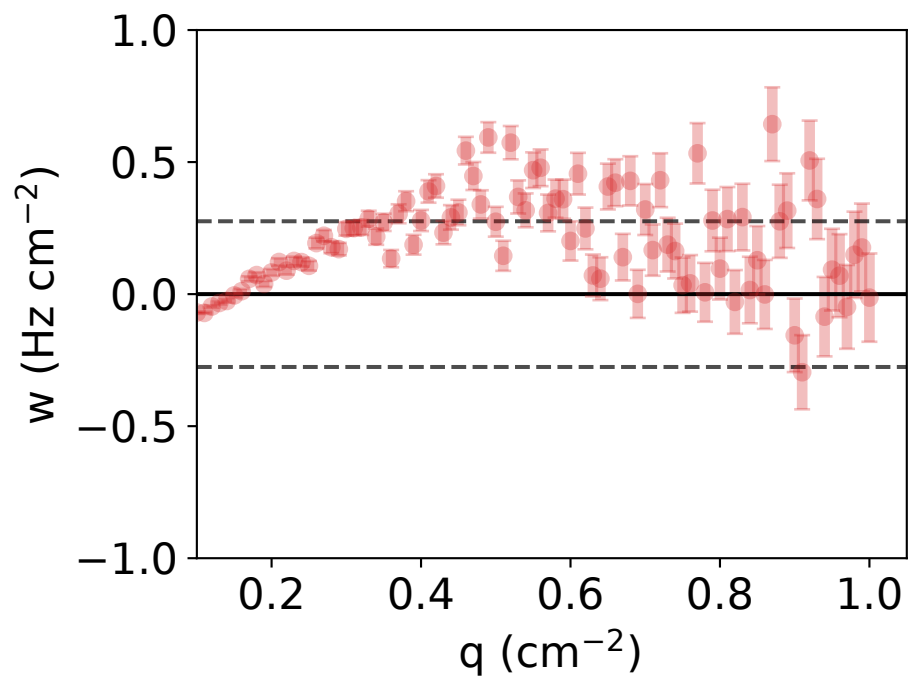
$\nu = 1.656 \pm 0.015$, $M = 16.891 \pm 0.653$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.277 Hz/cm²



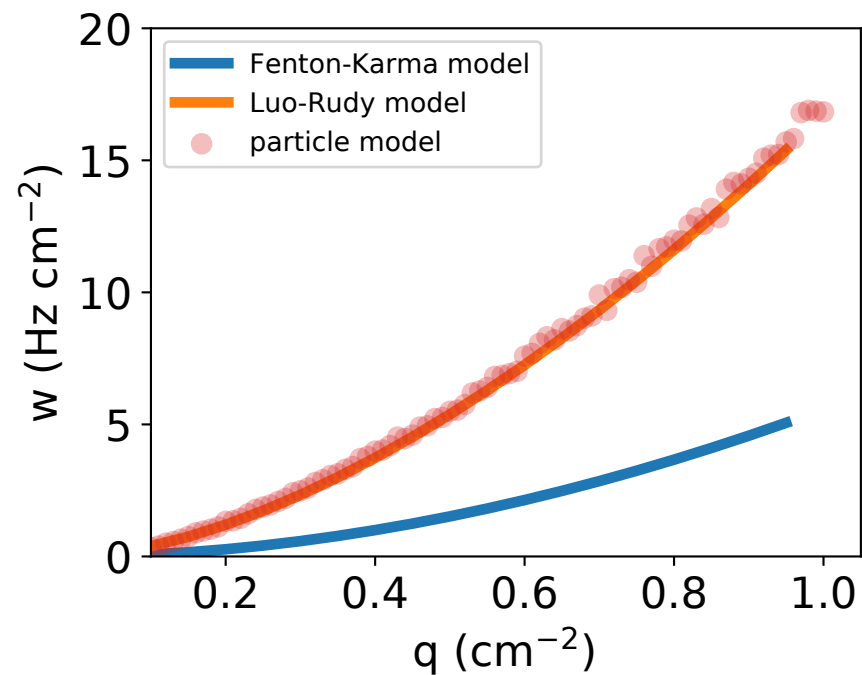
force_code=2, neighbors=0, reflect=0
 $r = 0.13354$ cm, $\kappa = 399.97000$ Hz
 $D = 0.09998$ cm²/s, $a = 9.92086$ cm²/s, $x_0 = 0$ cm



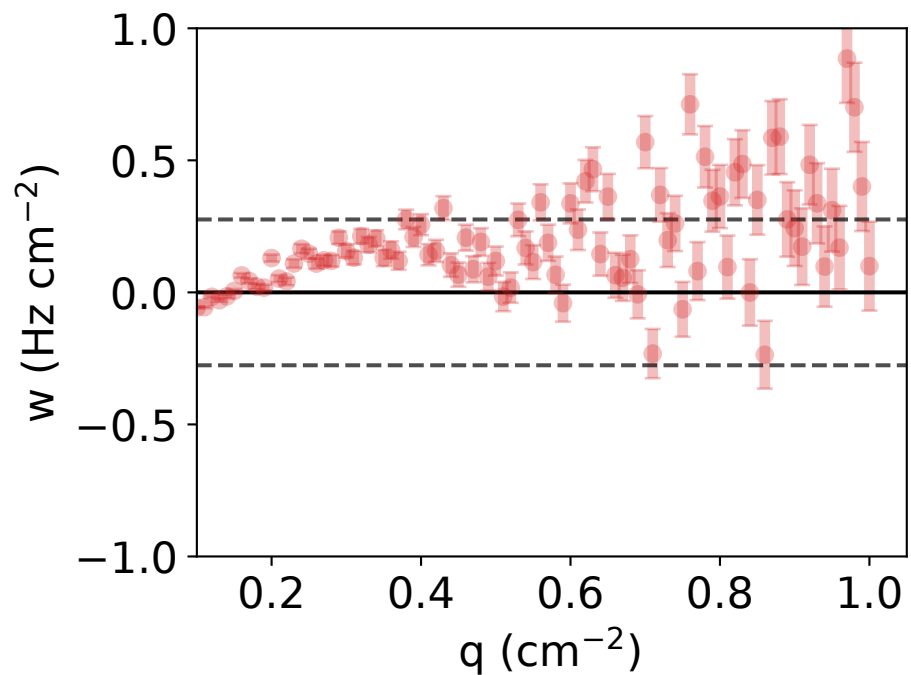
$\nu = 1.643 \pm 0.018$, $M = 16.602 \pm 0.743$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.276 Hz/cm²



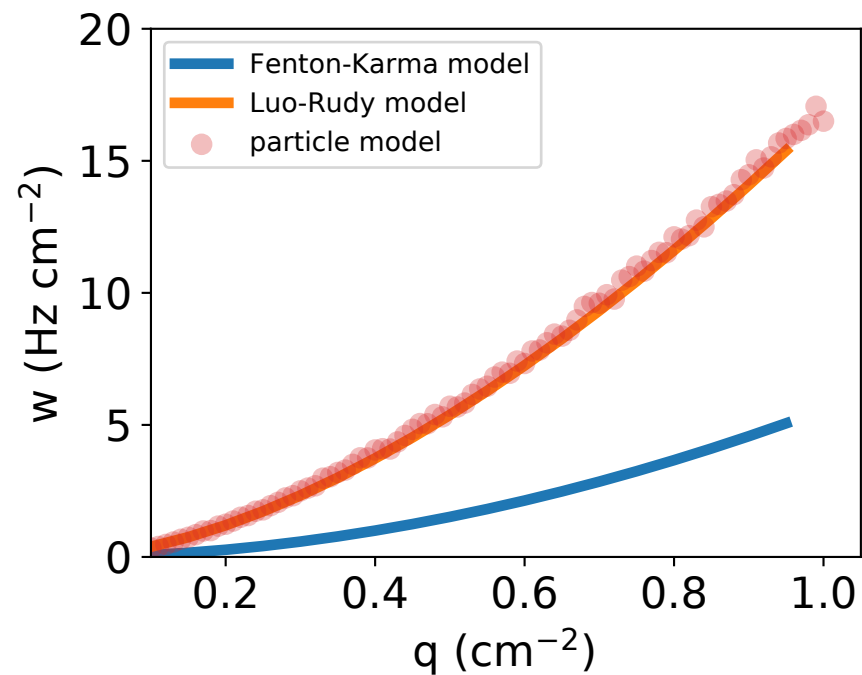
force_code=2, neighbors=0, reflect=0
 $r = 0.19259$ cm, $\kappa = 227.30600$ Hz
 $D = 0.60000$ cm²/s, $a = 10.57020$ cm²/s, $x_0 = 0$ cm



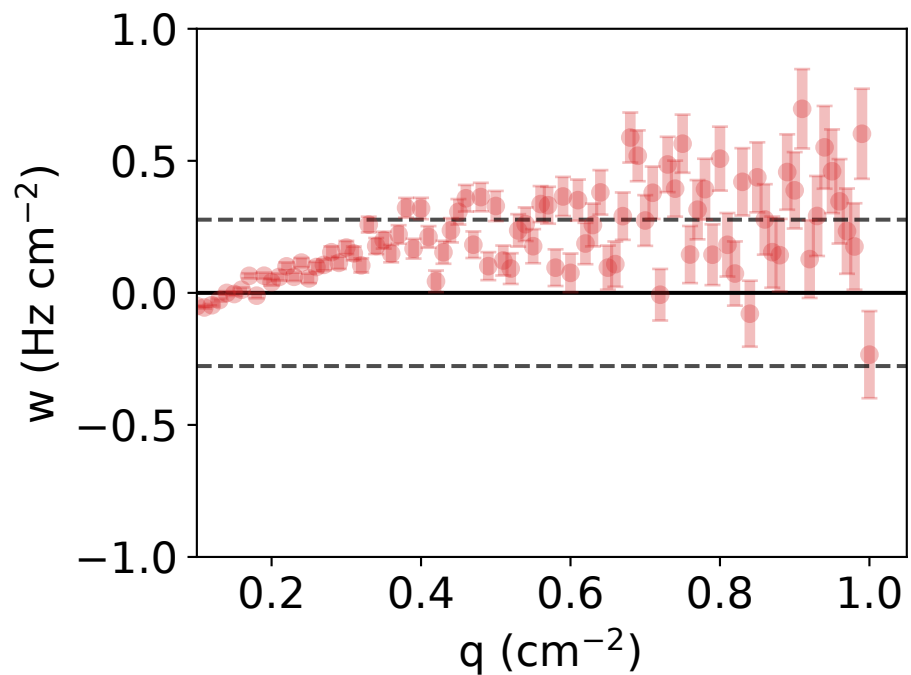
$\nu = 1.646 \pm 0.013$, $M = 16.966 \pm 0.580$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.276 Hz/cm²



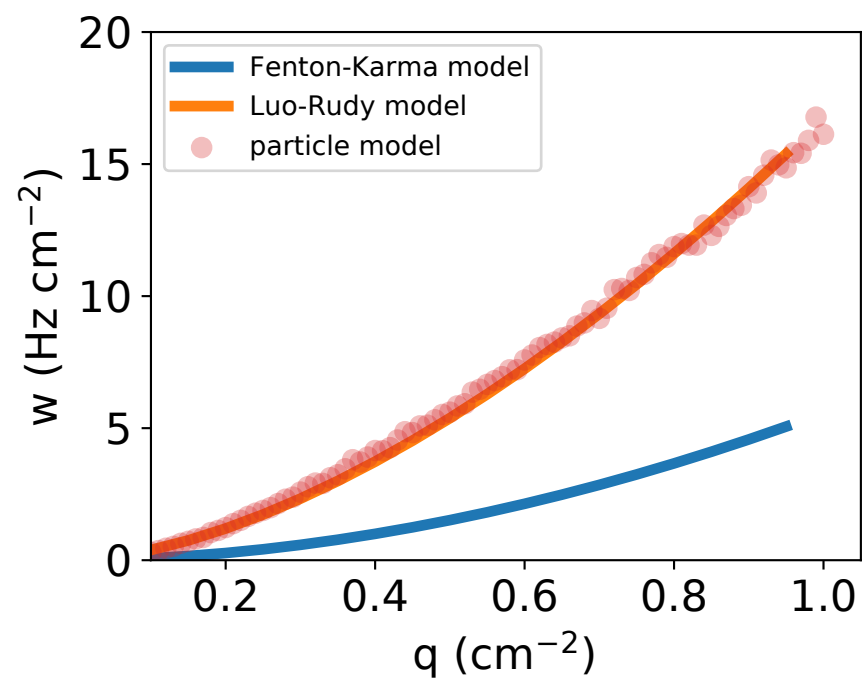
force_code=2, neighbors=0, reflect=0
 $r = 0.19246$ cm, $\kappa = 226.40800$ Hz
 $D = 0.58874$ cm²/s, $a = 10.57320$ cm²/s, $x_0 = 0$ cm



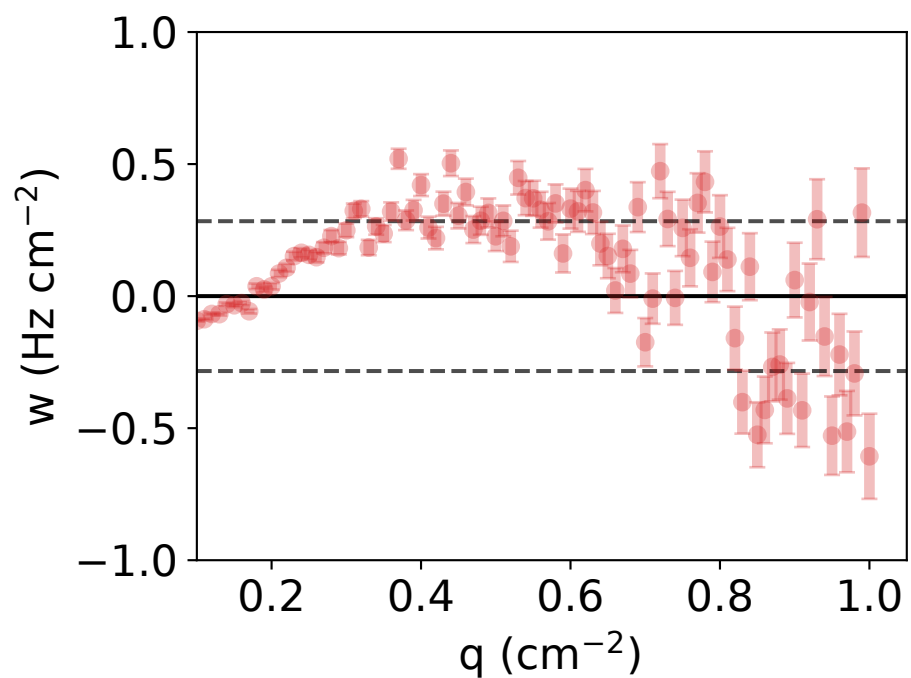
$\nu = 1.652 \pm 0.013$, $M = 16.940 \pm 0.544$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.277 Hz/cm²



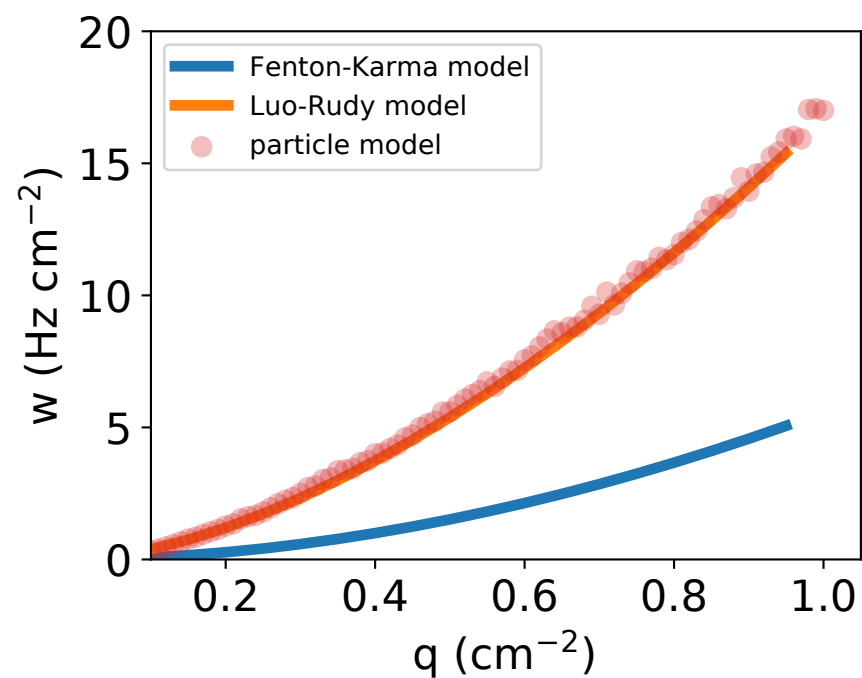
force_code=2, neighbors=0, reflect=0
 $r = 0.11224$ cm, $\kappa = 492.49100$ Hz
 $D = 0.49625$ cm²/s, $a = 8.88317$ cm²/s, $x_0 = 0$ cm



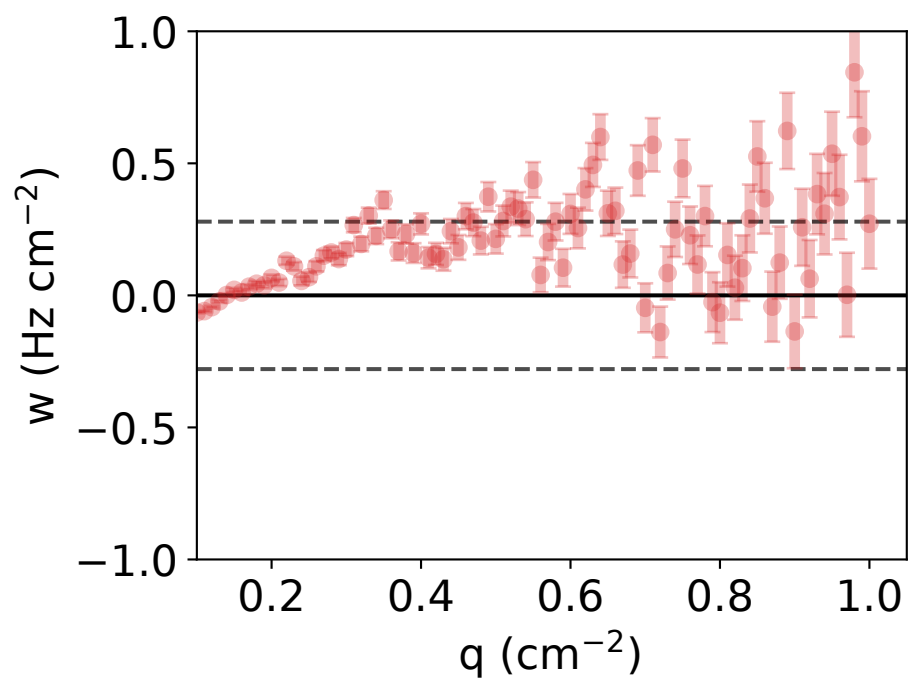
$\nu = 1.650 \pm 0.023$, $M = 16.197 \pm 0.925$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.284 Hz/cm²



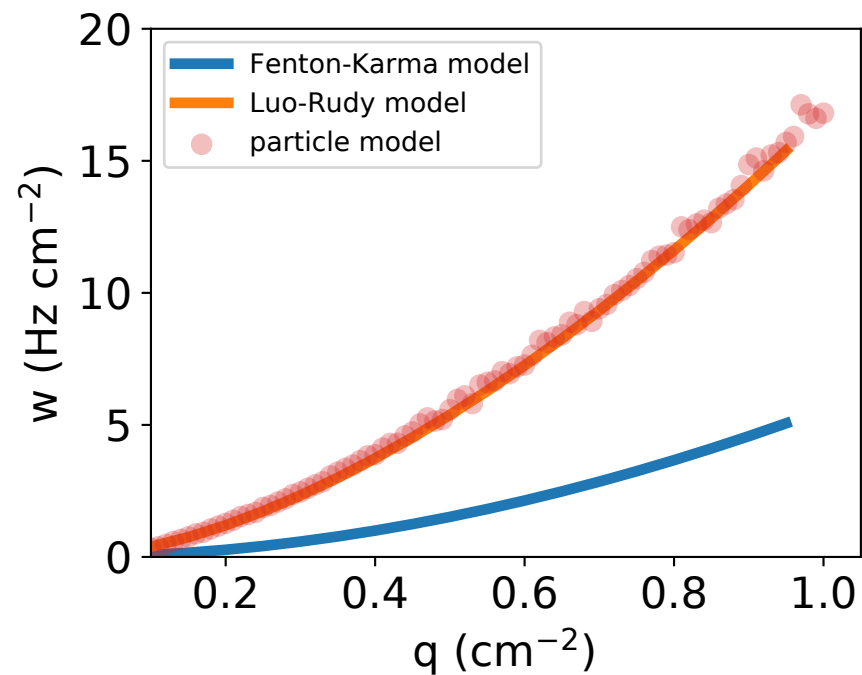
force_code=2, neighbors=0, reflect=0
 $r = 0.18546$ cm, $\kappa = 241.53500$ Hz
 $D = 0.38465$ cm²/s, $a = 10.49920$ cm²/s, $x_0 = 0$ cm



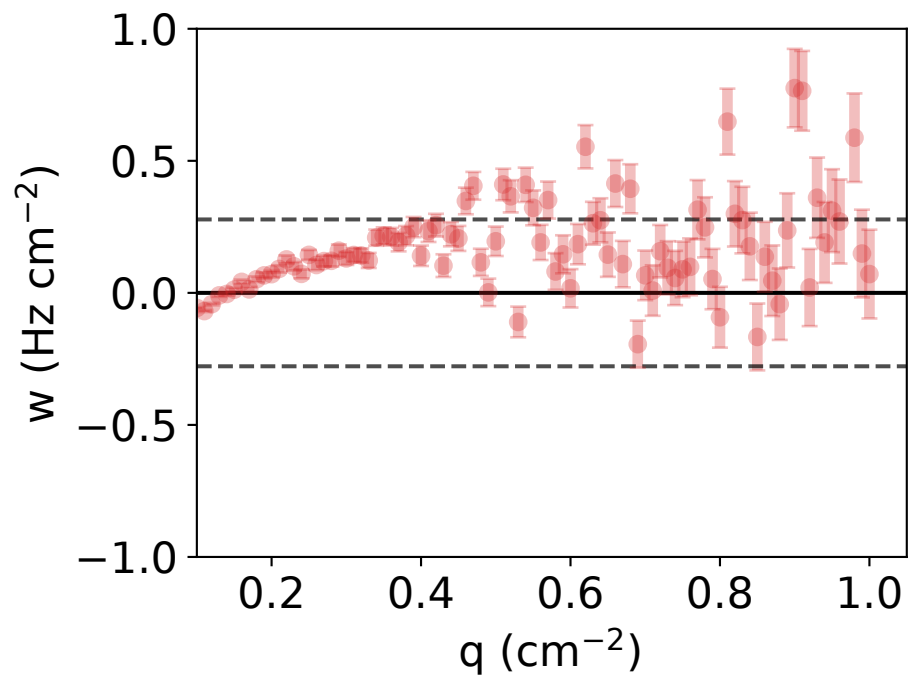
$\nu = 1.648 \pm 0.015$, $M = 16.854 \pm 0.621$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.279 Hz/cm²



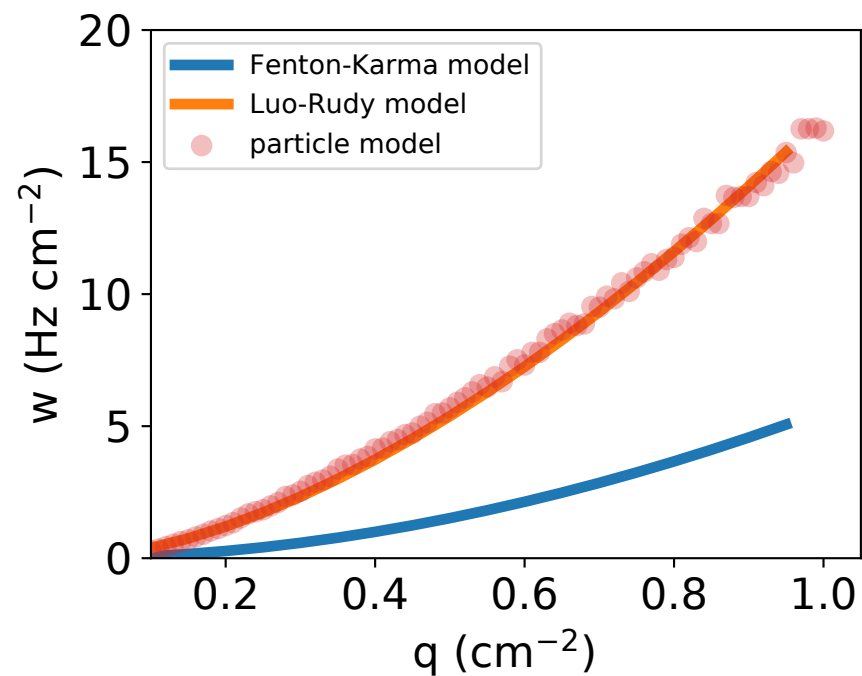
force_code=2, neighbors=0, reflect=0
 $r = 0.19561$ cm, $\kappa = 222.46500$ Hz
 $D = 0.32028$ cm²/s, $a = 10.86150$ cm²/s, $x_0 = 0$ cm



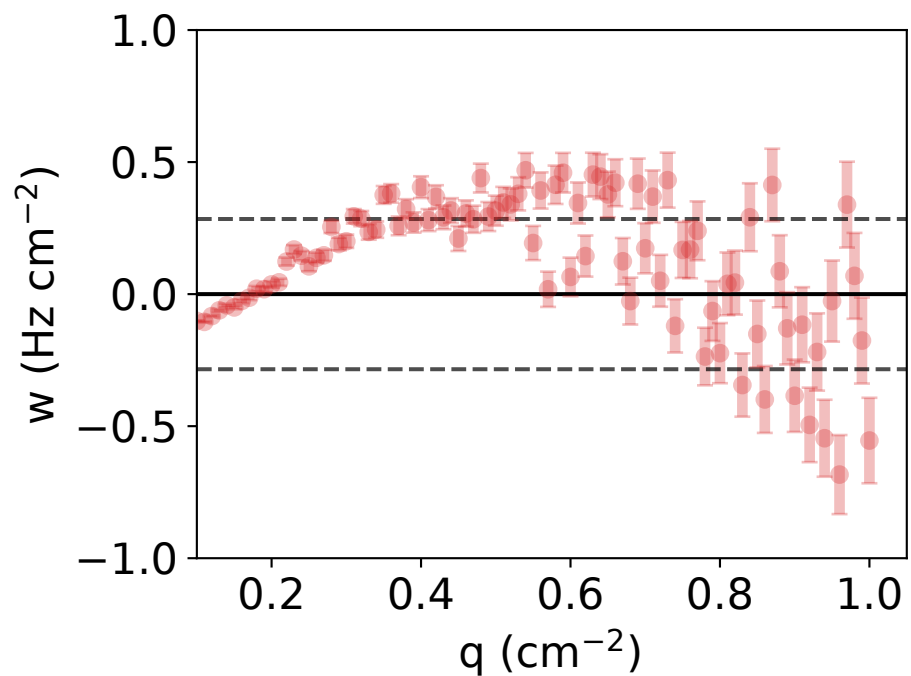
$\nu = 1.645 \pm 0.014$, $M = 16.873 \pm 0.619$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.278 Hz/cm²



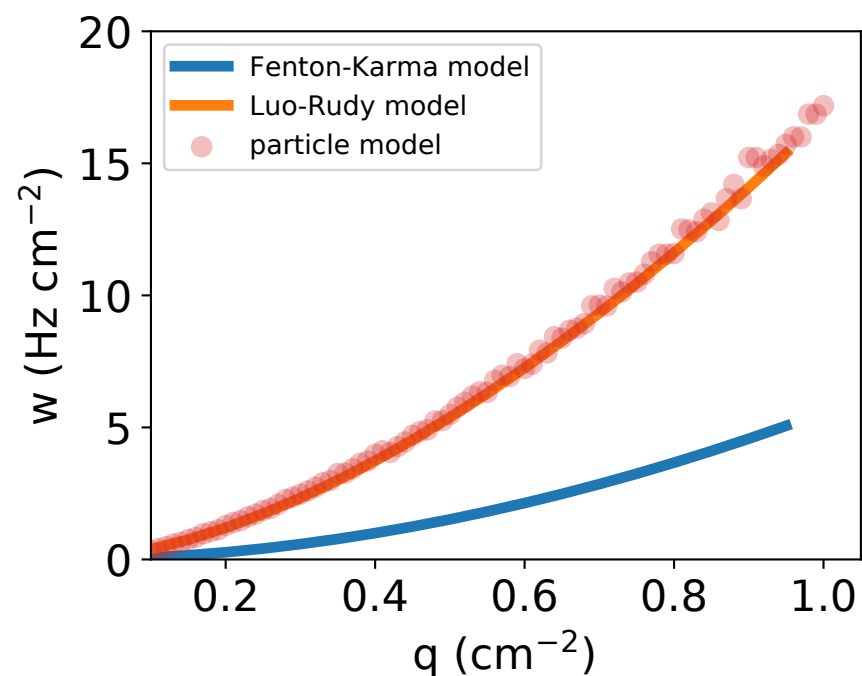
force_code=2, neighbors=0, reflect=0
 $r = 0.10009$ cm, $\kappa = 580.81500$ Hz
 $D = 0.21918$ cm²/s, $a = 8.73092$ cm²/s, $x_0 = 0$ cm



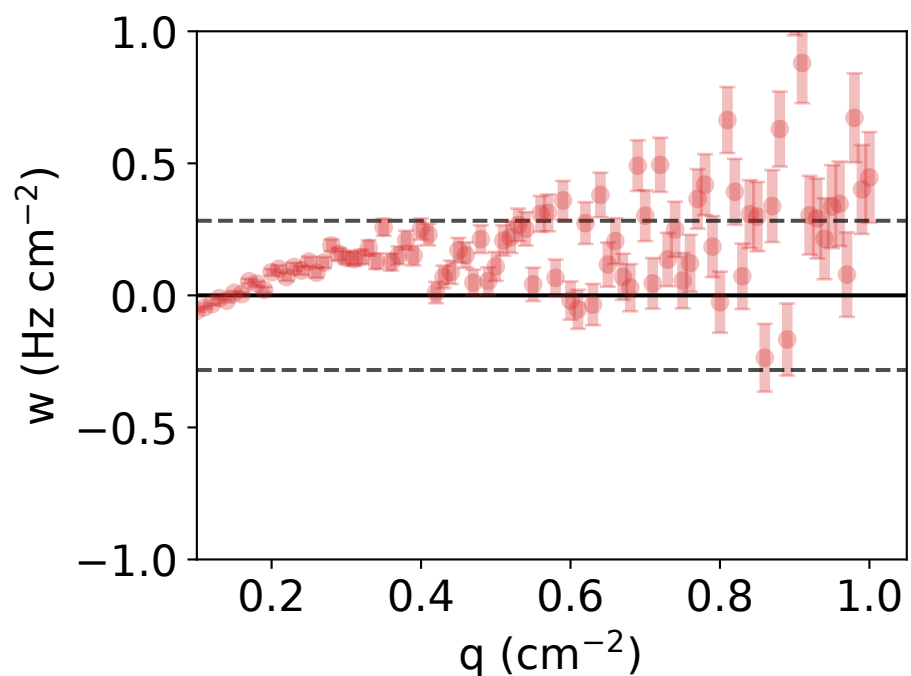
$\nu = 1.658 \pm 0.024$, $M = 16.218 \pm 0.960$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.284 Hz/cm²



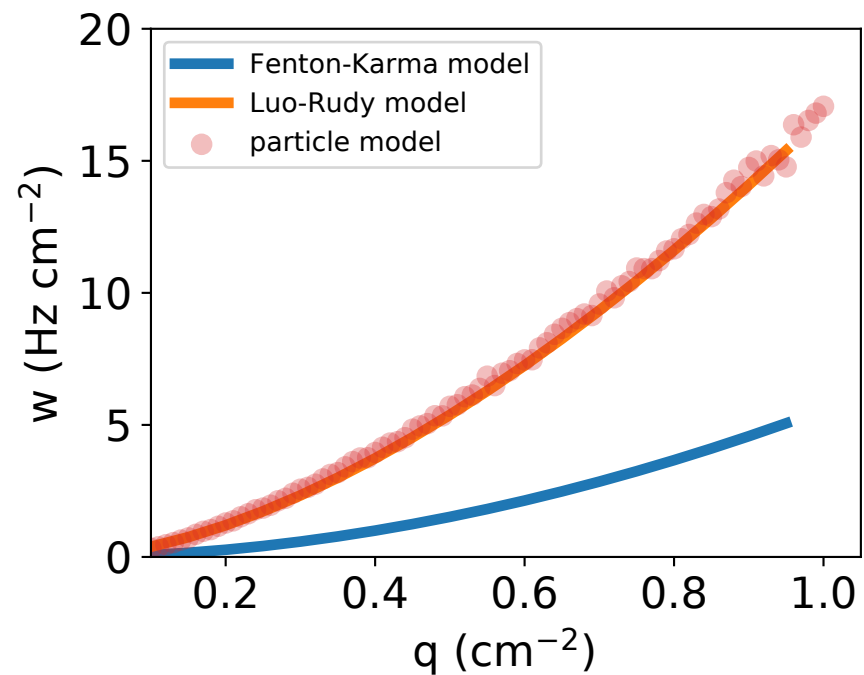
force_code=2, neighbors=0, reflect=0
 $r = 0.20558$ cm, $\kappa = 202.02500$ Hz
 $D = 0.68583$ cm²/s, $a = 10.89000$ cm²/s, $x_0 = 0$ cm



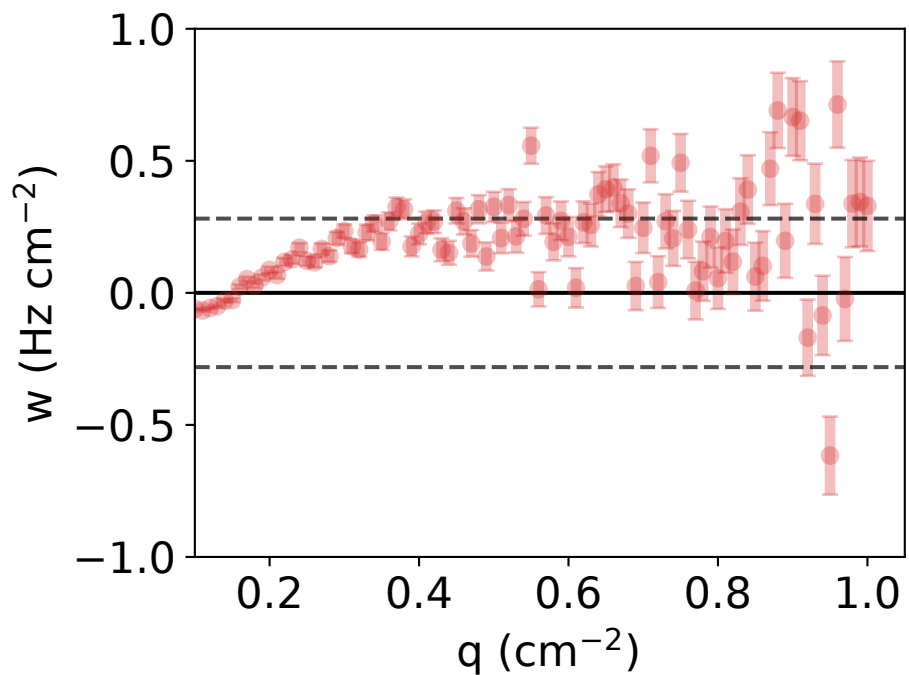
$\nu = 1.648 \pm 0.012$, $M = 16.996 \pm 0.553$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.282 Hz/cm²



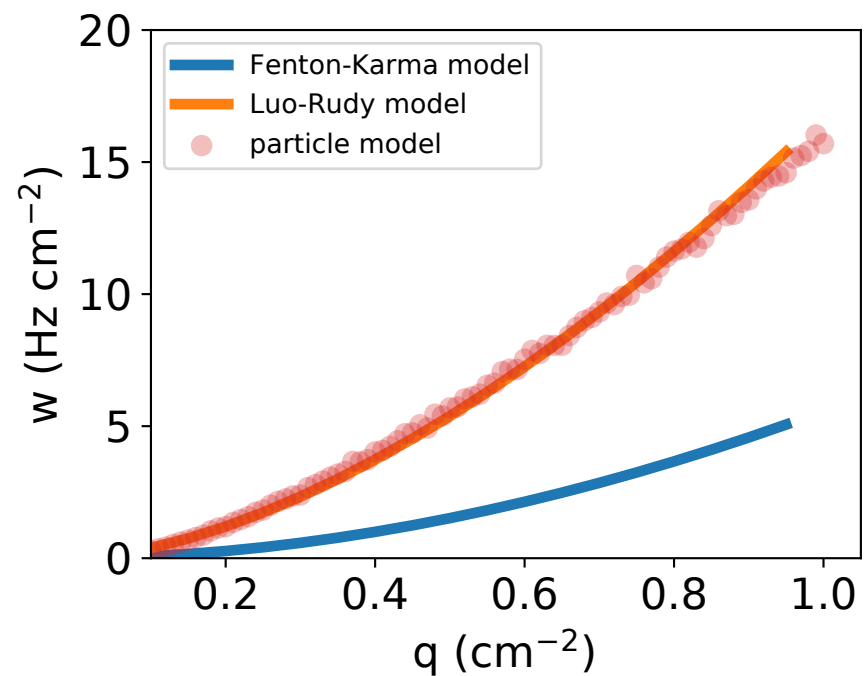
force_code=2, neighbors=0, reflect=0
 $r = 0.16031$ cm, $\kappa = 300.00000$ Hz
 $D = 0.73275$ cm²/s, $a = 9.83791$ cm²/s, $x_0 = 0$ cm



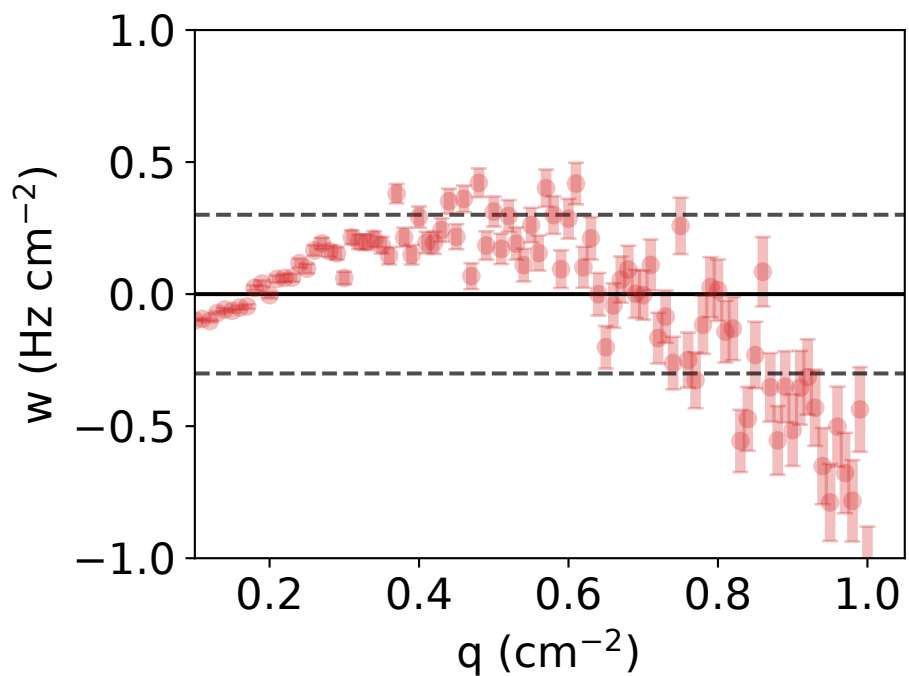
$\nu = 1.650 \pm 0.016$, $M = 16.782 \pm 0.678$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.281 Hz/cm²



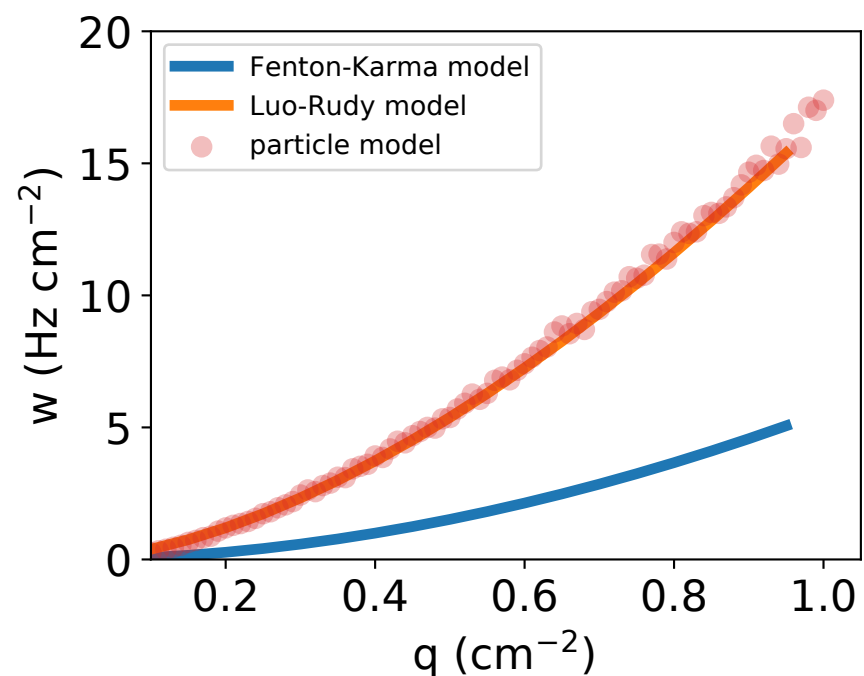
force_code=2, neighbors=0, reflect=0
 $r = 0.08041$ cm, $\kappa = 759.70600$ Hz
 $D = 0.11007$ cm²/s, $a = 8.42790$ cm²/s, $x_0 = 0$ cm



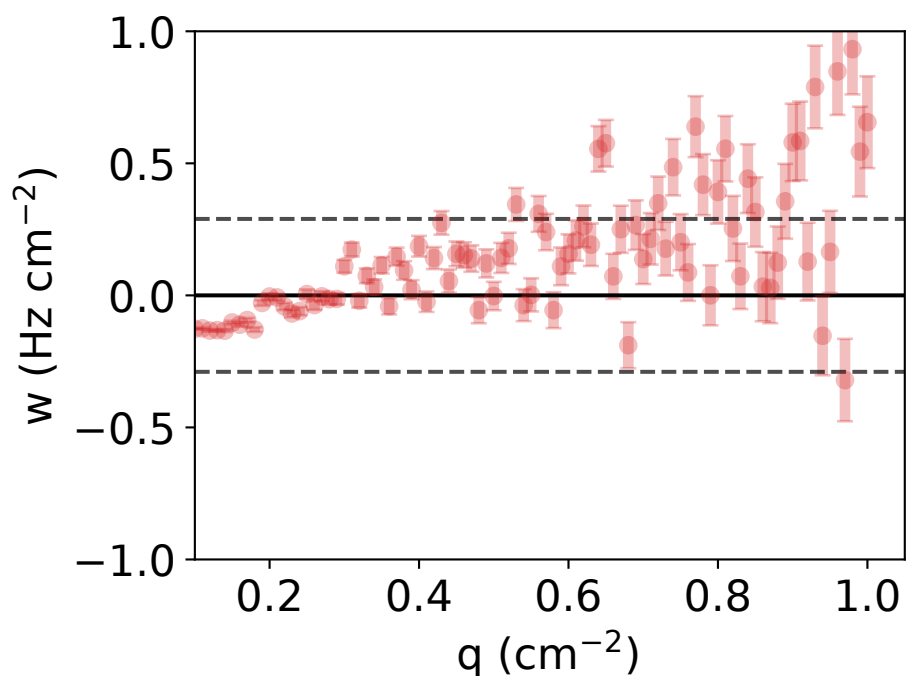
$\nu = 1.655 \pm 0.023$, $M = 15.877 \pm 0.904$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.300 Hz/cm²



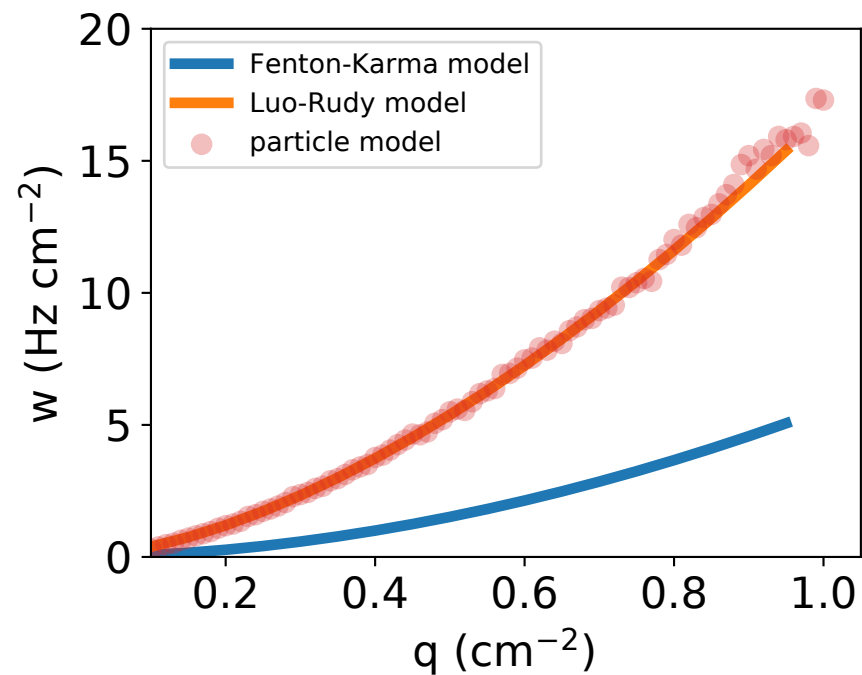
force_code=2, neighbors=0, reflect=0
 $r = 0.12932$ cm, $\kappa = 470.66100$ Hz
 $D = 0.21467$ cm²/s, $a = 7.53266$ cm²/s, $x_0 = 0$ cm



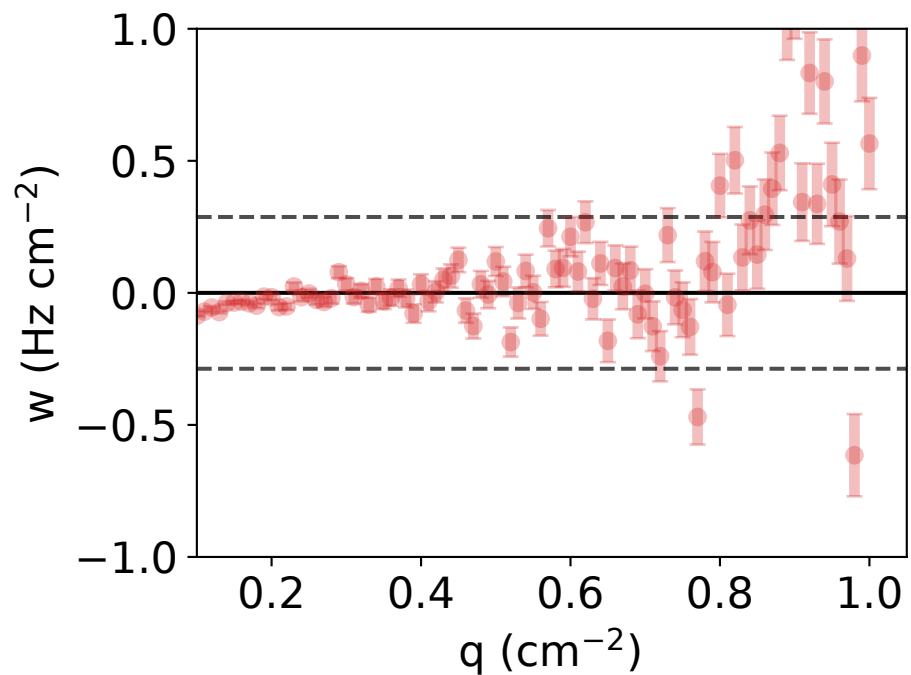
$\nu = 1.737 \pm 0.020$, $M = 17.016 \pm 0.828$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.289 Hz/cm²



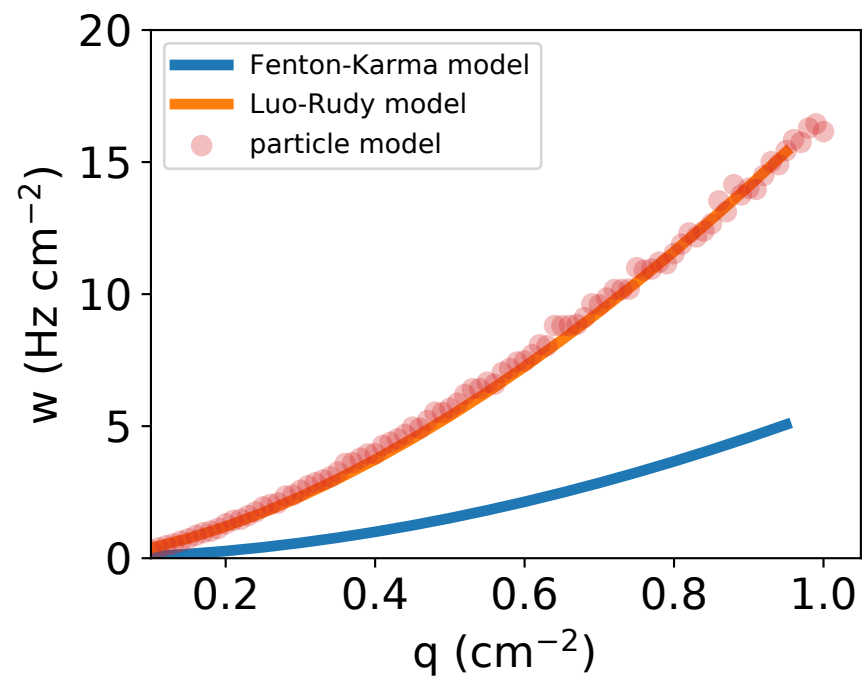
force_code=2, neighbors=0, reflect=0
 $r = 0.24837$ cm, $\kappa = 154.06100$ Hz
 $D = 0.24594$ cm²/s, $a = 10.57230$ cm²/s, $x_0 = 0$ cm



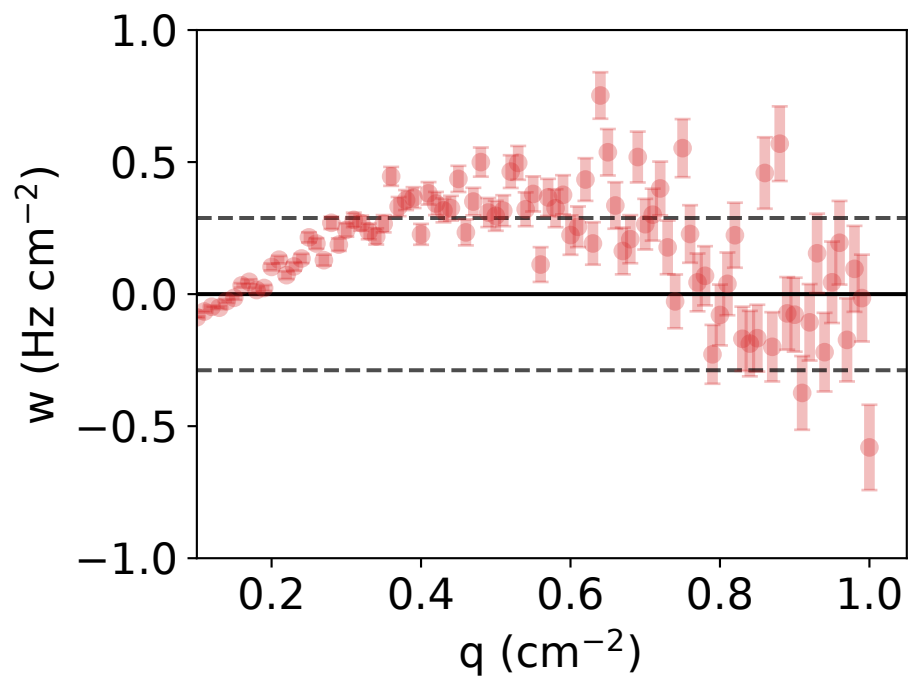
$\nu = 1.690 \pm 0.011$, $M = 17.108 \pm 0.535$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.287 Hz/cm²



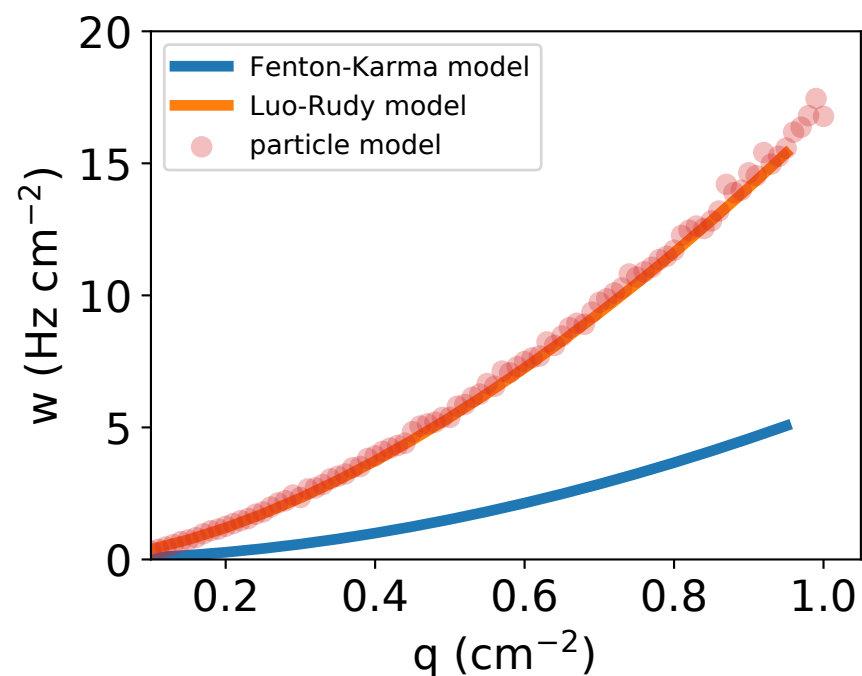
force_code=2, neighbors=0, reflect=0
 $r = 0.13119$ cm, $\kappa = 400.00000$ Hz
 $D = 0.36888$ cm²/s, $a = 9.51404$ cm²/s, $x_0 = 0$ cm



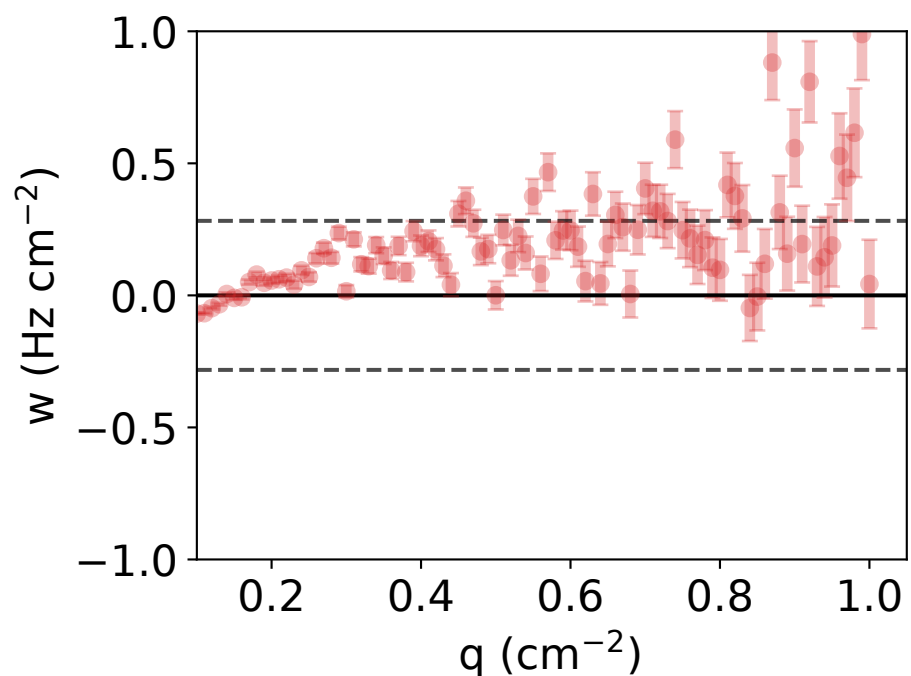
$\nu = 1.642 \pm 0.020$, $M = 16.397 \pm 0.838$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.288 Hz/cm²



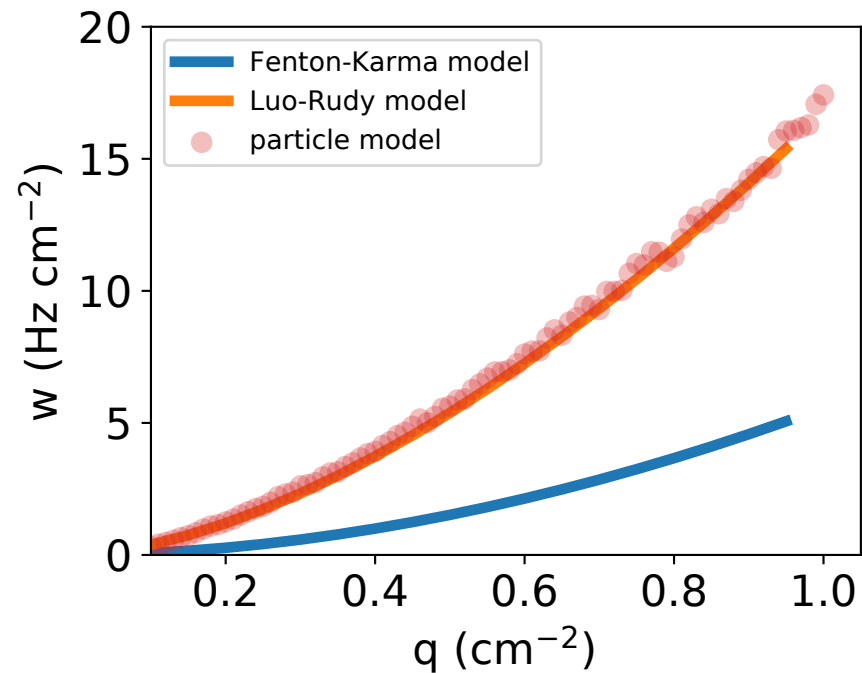
force_code=2, neighbors=0, reflect=0
 $r = 0.18012$ cm, $\kappa = 250.00000$ Hz
 $D = 0.74045$ cm²/s, $a = 10.16220$ cm²/s, $x_0 = 0$ cm



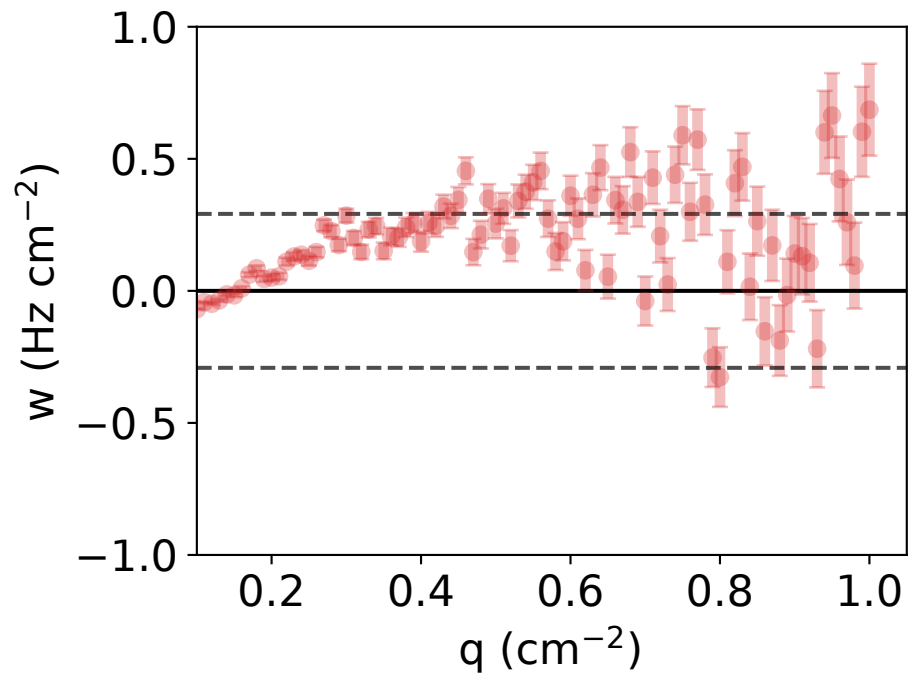
$\nu = 1.657 \pm 0.014$, $M = 16.985 \pm 0.592$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.282 Hz/cm²



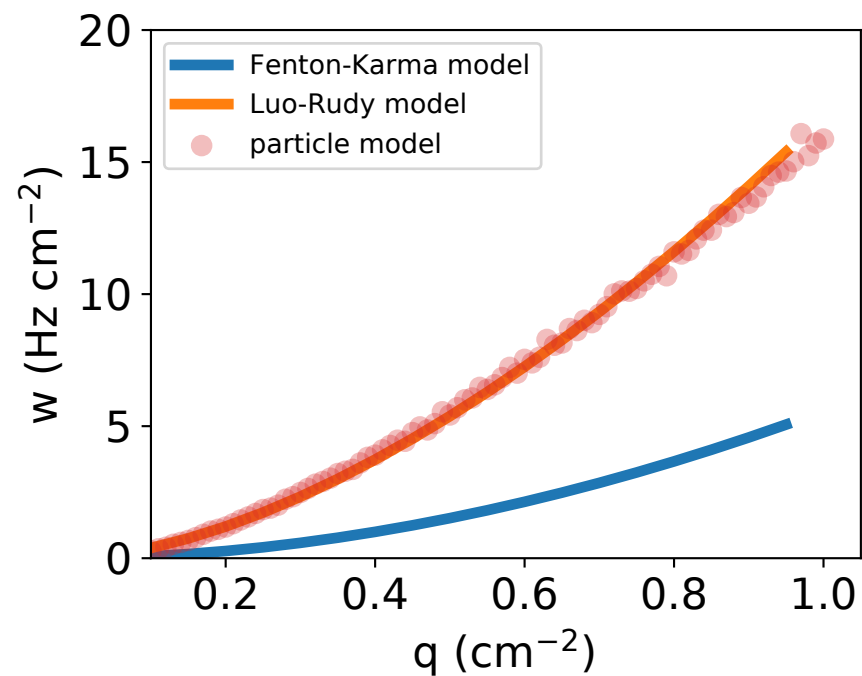
force_code=2, neighbors=0, reflect=0
 $r = 0.16157$ cm, $\kappa = 297.46300$ Hz
 $D = 0.51522$ cm²/s, $a = 9.98178$ cm²/s, $x_0 = 0$ cm



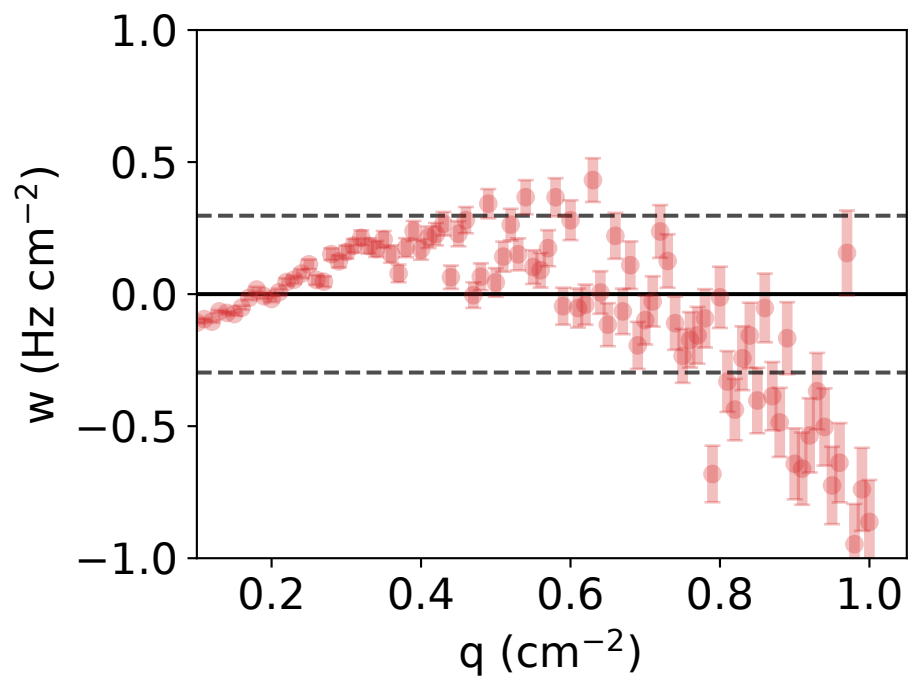
$\nu = 1.645 \pm 0.016$, $M = 16.780 \pm 0.678$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.291 Hz/cm²



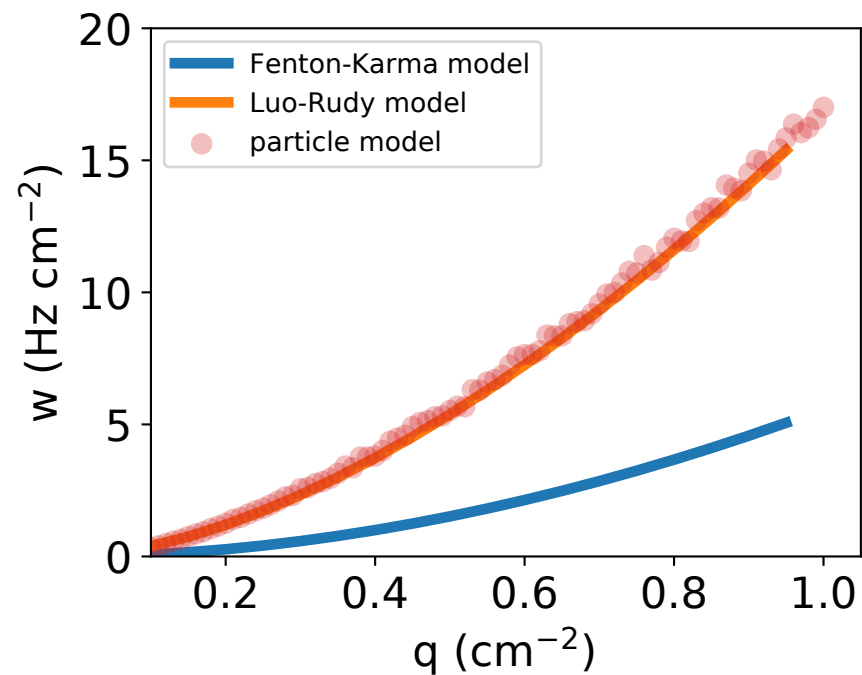
force_code=2, neighbors=0, reflect=0
 $r = 0.10859$ cm, $\kappa = 500.00000$ Hz
 $D = 0.49107$ cm²/s, $a = 8.49700$ cm²/s, $x_0 = 0$ cm



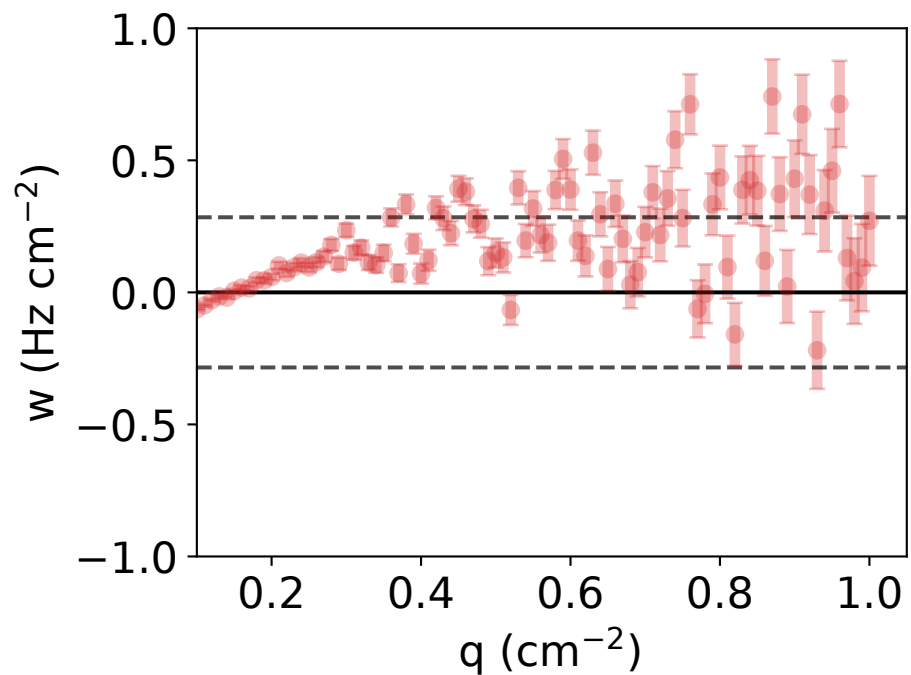
$\nu = 1.662 \pm 0.022$, $M = 15.910 \pm 0.872$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.297 Hz/cm²



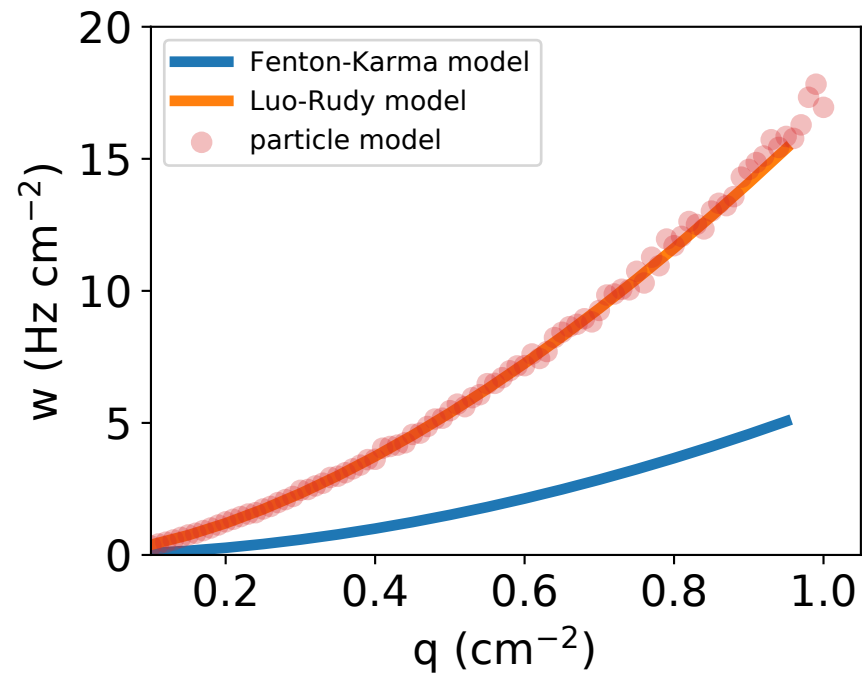
force_code=2, neighbors=0, reflect=0
 $r = 0.19060$ cm, $\kappa = 229.54000$ Hz
 $D = 0.80000$ cm²/s, $a = 10.50410$ cm²/s, $x_0 = 0$ cm



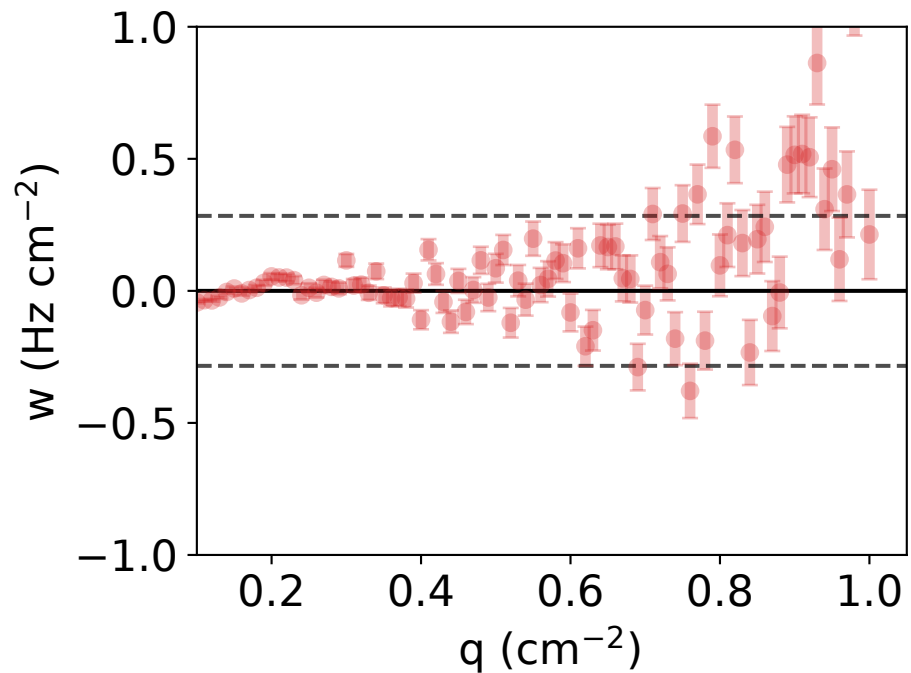
$\nu = 1.649 \pm 0.013$, $M = 16.909 \pm 0.587$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.284 Hz/cm²



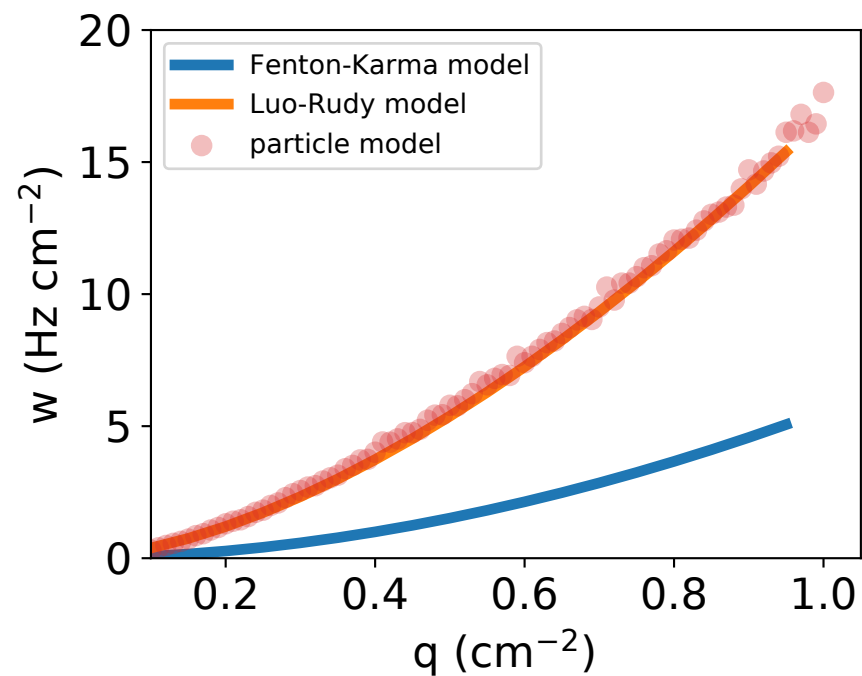
force_code=2, neighbors=0, reflect=0
 $r = 0.28964$ cm, $\kappa = 113.82700$ Hz
 $D = 0.41844$ cm²/s, $a = 12.84610$ cm²/s, $x_0 = 0$ cm



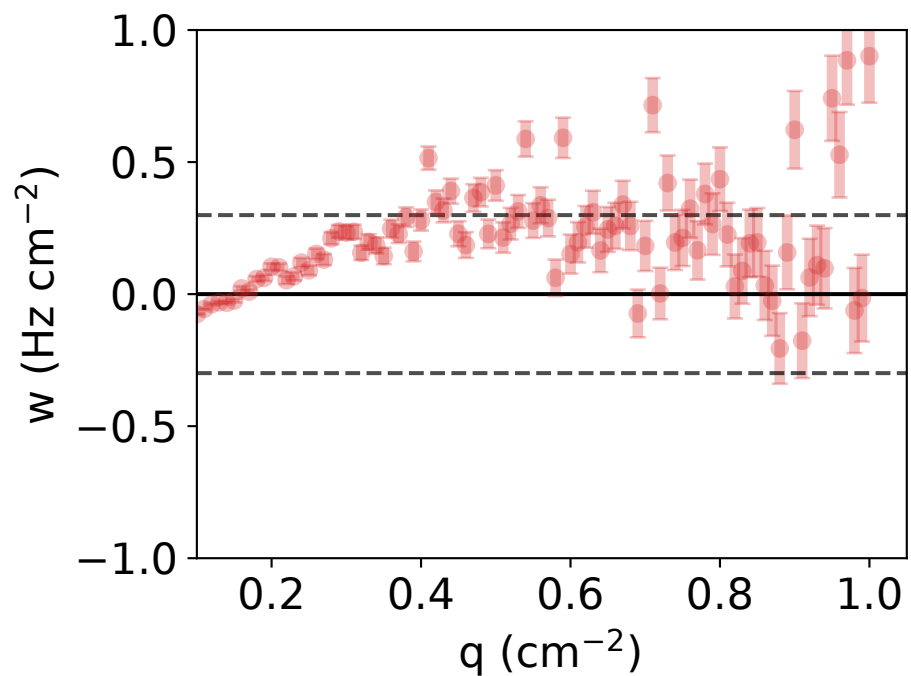
$\nu = 1.658 \pm 0.009$, $M = 17.150 \pm 0.471$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.284 Hz/cm²



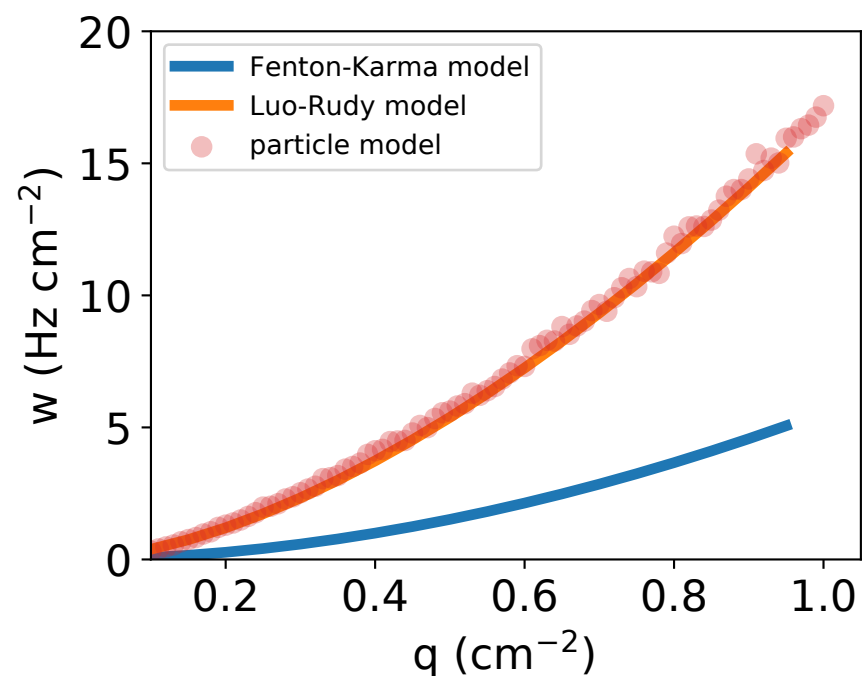
force_code=2, neighbors=0, reflect=0
 $r = 0.15989$ cm, $\kappa = 300.00000$ Hz
 $D = 0.75541$ cm²/s, $a = 9.83010$ cm²/s, $x_0 = 0$ cm



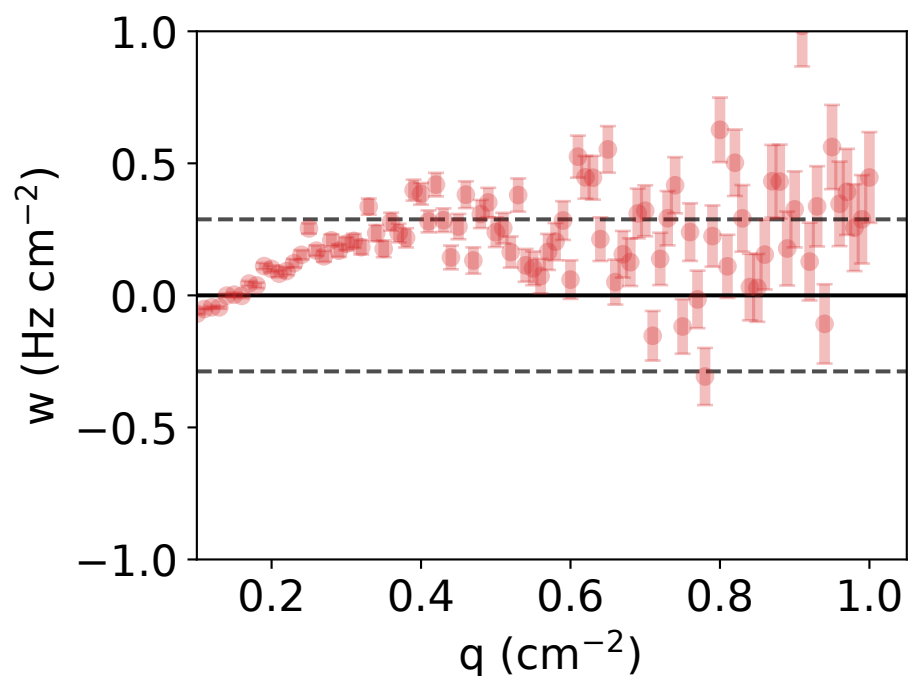
$\nu = 1.650 \pm 0.016$, $M = 16.784 \pm 0.704$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.299 Hz/cm²



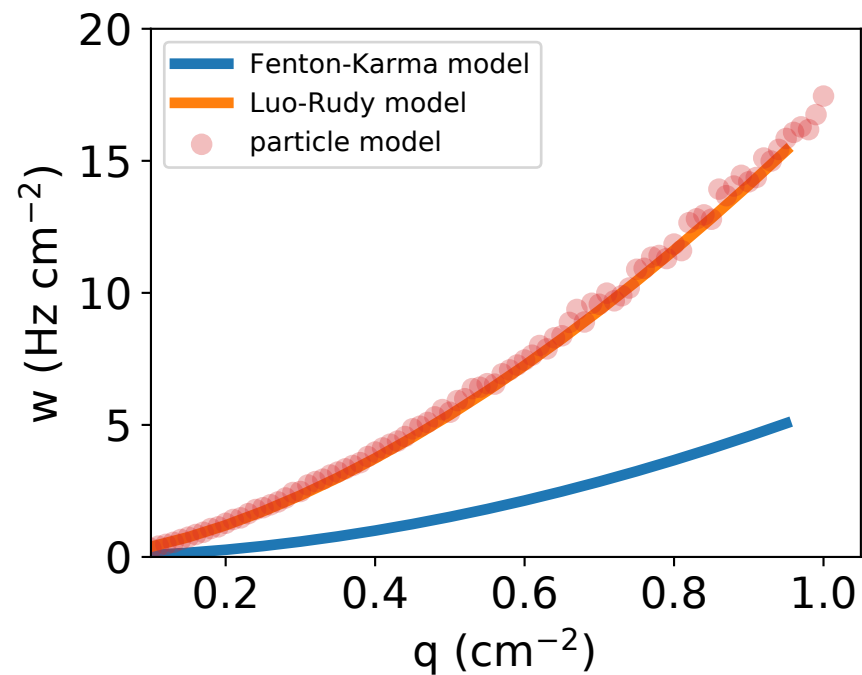
force_code=2, neighbors=0, reflect=0
 $r = 0.15998$ cm, $\kappa = 300.00000$ Hz
 $D = 0.11620$ cm²/s, $a = 10.67650$ cm²/s, $x_0 = 0$ cm



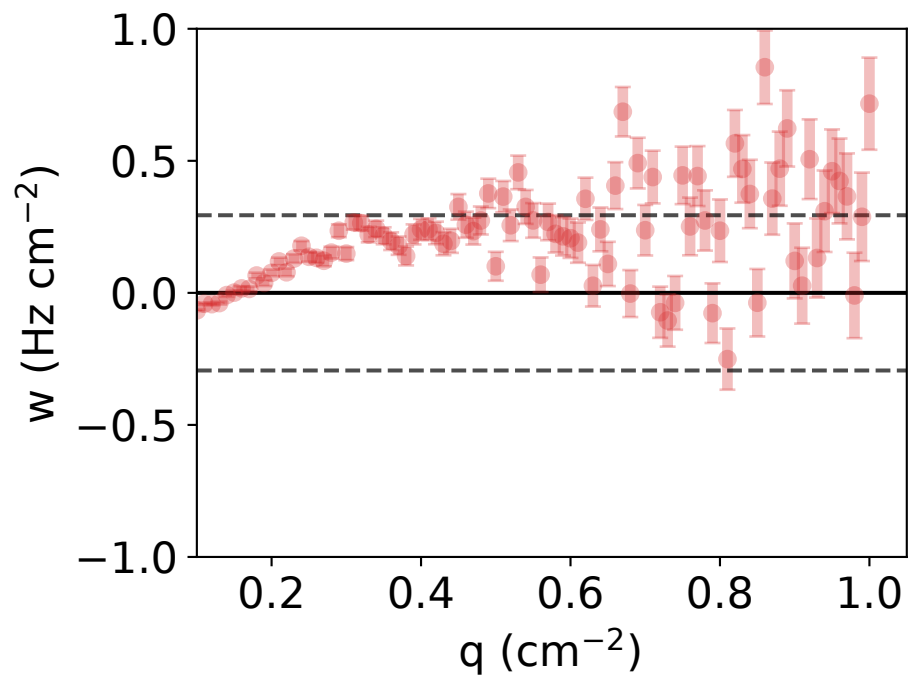
$\nu = 1.643 \pm 0.017$, $M = 16.813 \pm 0.698$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.288 Hz/cm²



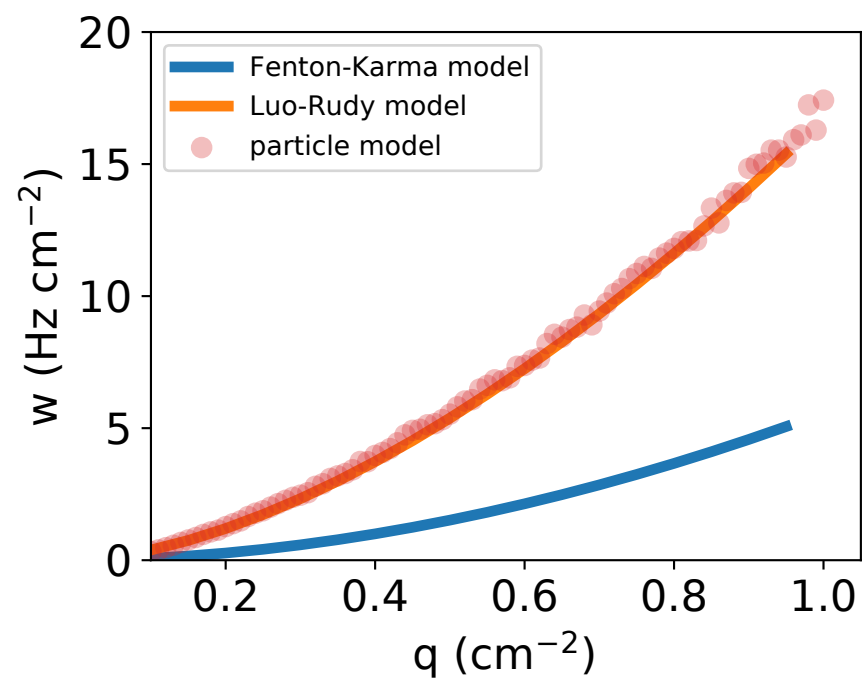
force_code=2, neighbors=0, reflect=0
 $r = 0.18050$ cm, $\kappa = 250.00000$ Hz
 $D = 0.20000$ cm²/s, $a = 10.66030$ cm²/s, $x_0 = 0$ cm



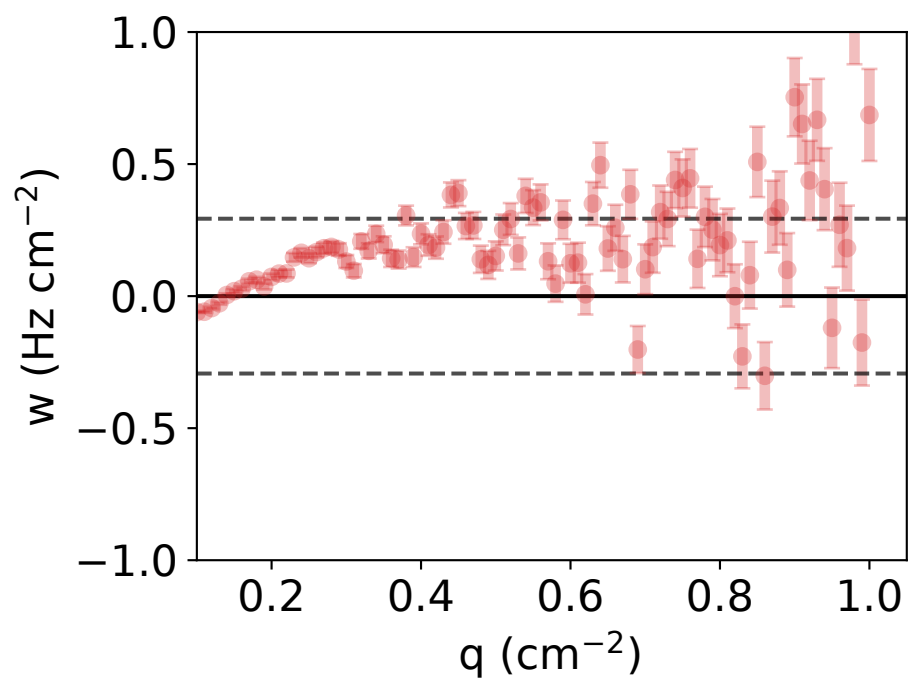
$\nu = 1.646 \pm 0.015$, $M = 16.895 \pm 0.629$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.294 Hz/cm²



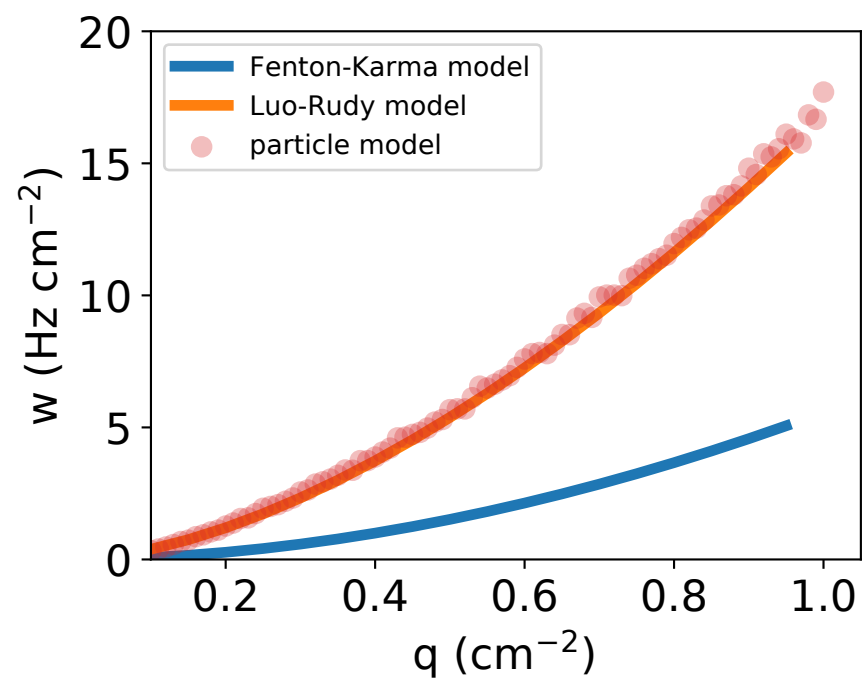
force_code=2, neighbors=0, reflect=0
 $r = 0.17464$ cm, $\kappa = 265.30100$ Hz
 $D = 0.32241$ cm²/s, $a = 10.40490$ cm²/s, $x_0 = 0$ cm



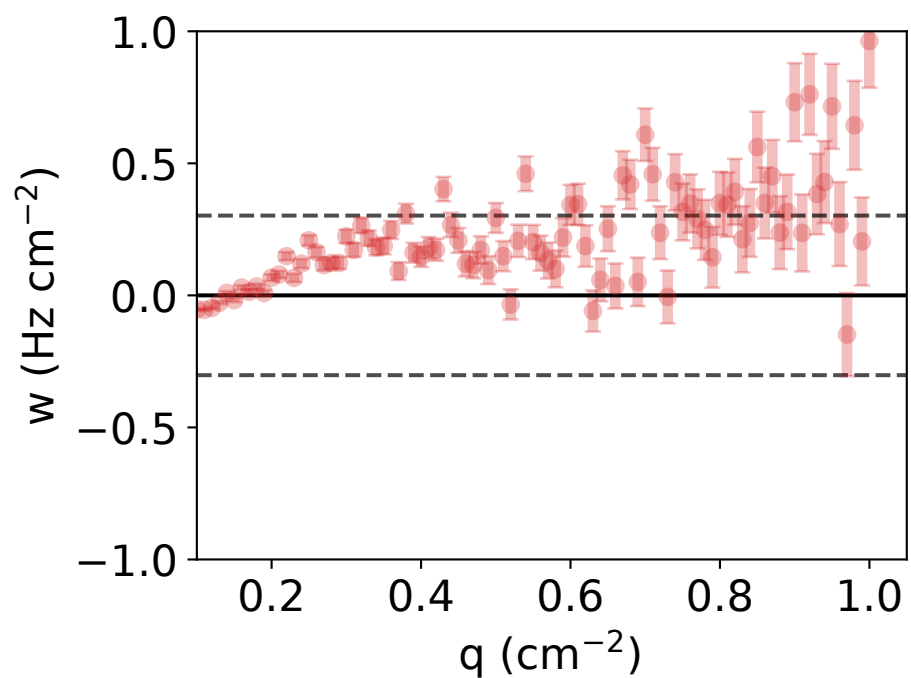
$\nu = 1.644 \pm 0.015$, $M = 16.892 \pm 0.628$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.293 Hz/cm²



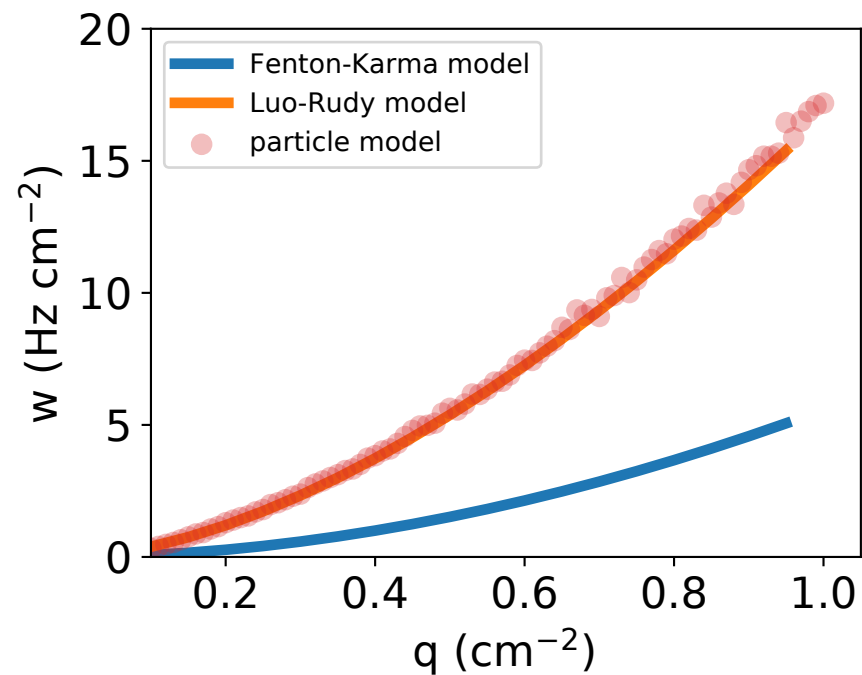
force_code=2, neighbors=0, reflect=0
 $r = 0.19347$ cm, $\kappa = 224.60000$ Hz
 $D = 0.60160$ cm²/s, $a = 10.59660$ cm²/s, $x_0 = 0$ cm



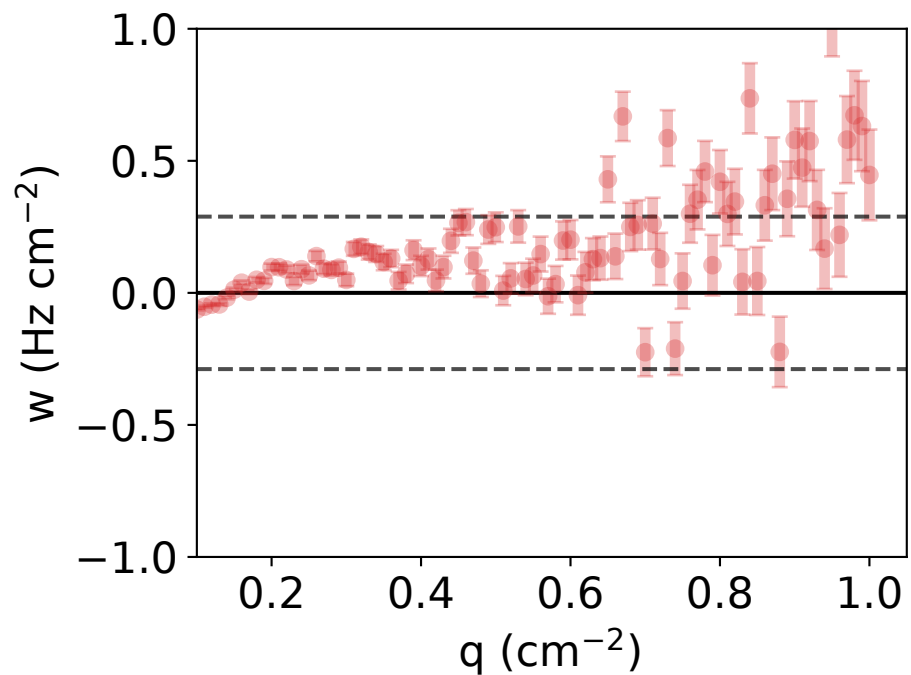
$\nu = 1.651 \pm 0.014$, $M = 17.039 \pm 0.576$ cm²($\nu - 1$)/s
 RMSE_{particle vs full} = 0.302 Hz/cm²



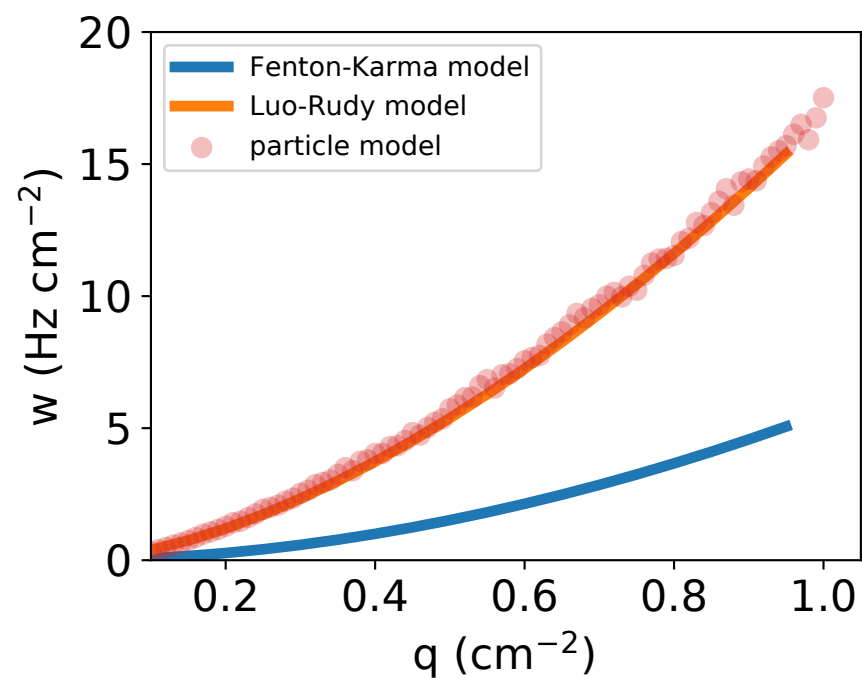
force_code=2, neighbors=0, reflect=0
 $r = 0.20925$ cm, $\kappa = 197.43800$ Hz
 $D = 0.68719$ cm²/s, $a = 10.83260$ cm²/s, $x_0 = 0$ cm



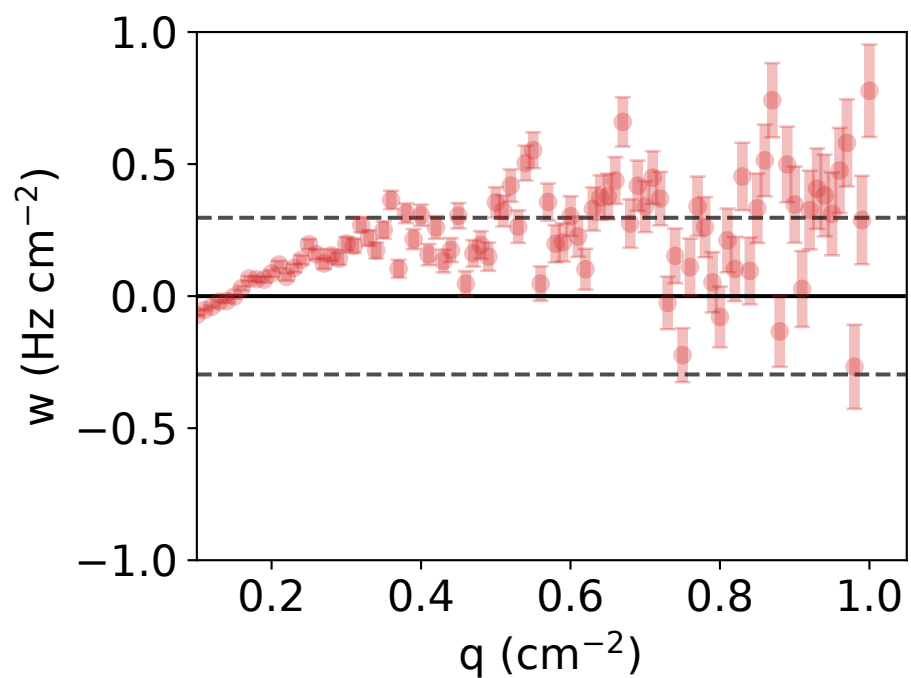
$\nu = 1.656 \pm 0.013$, $M = 17.081 \pm 0.555$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.289 Hz/cm²



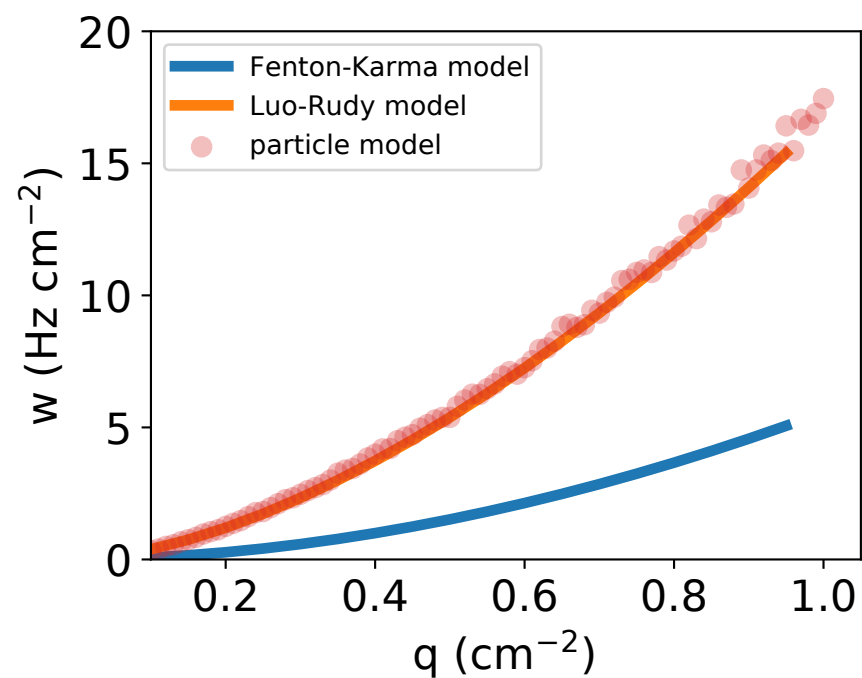
force_code=2, neighbors=0, reflect=0
 $r = 0.18062$ cm, $\kappa = 250.00000$ Hz
 $D = 0.53199$ cm²/s, $a = 10.49970$ cm²/s, $x_0 = 0$ cm



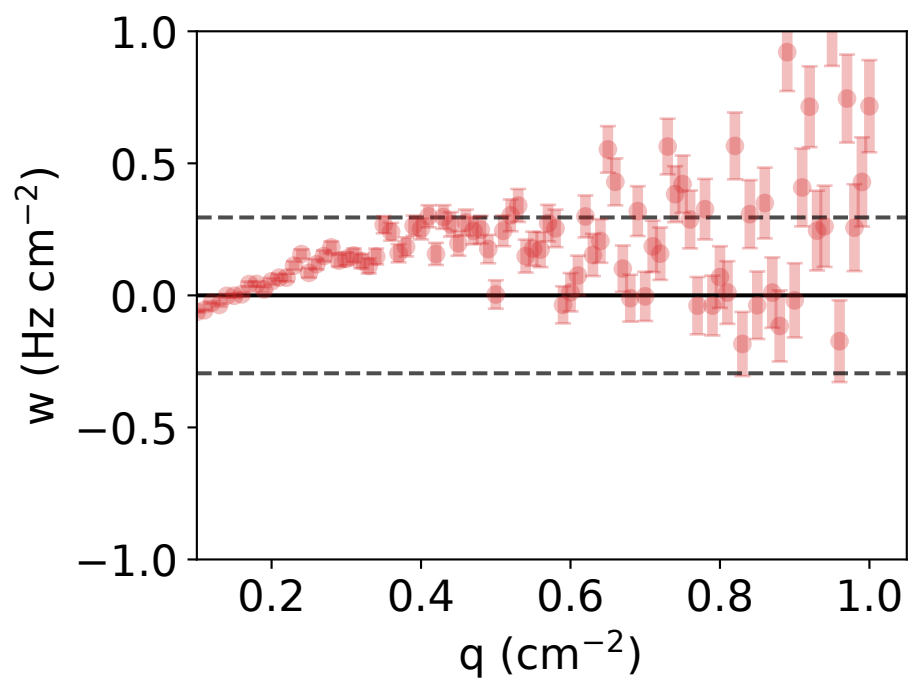
$\nu = 1.646 \pm 0.015$, $M = 16.877 \pm 0.654$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.297 Hz/cm²



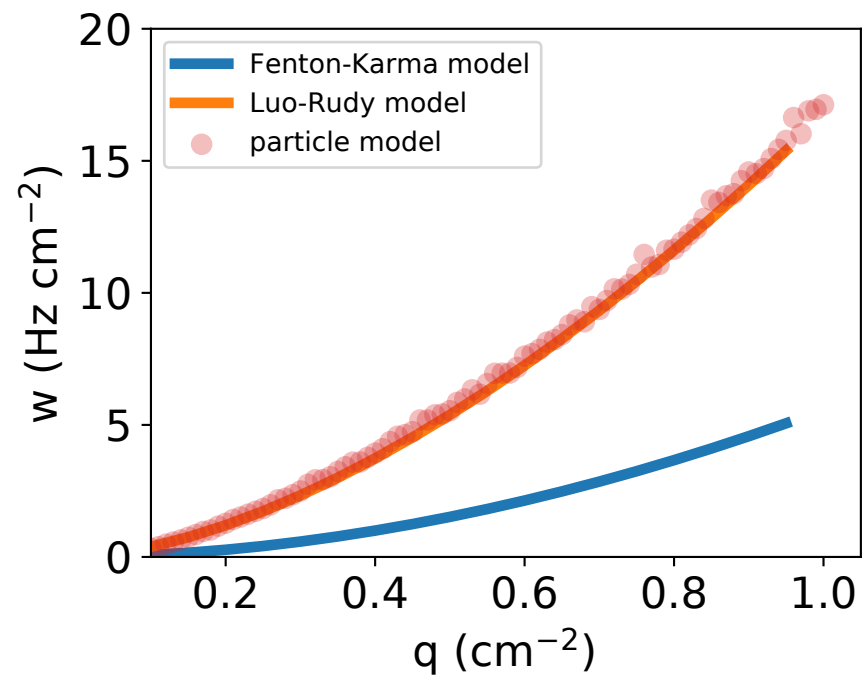
force_code=2, neighbors=0, reflect=0
 $r = 0.18054$ cm, $\kappa = 250.00000$ Hz
 $D = 0.41098$ cm²/s, $a = 10.42850$ cm²/s, $x_0 = 0$ cm



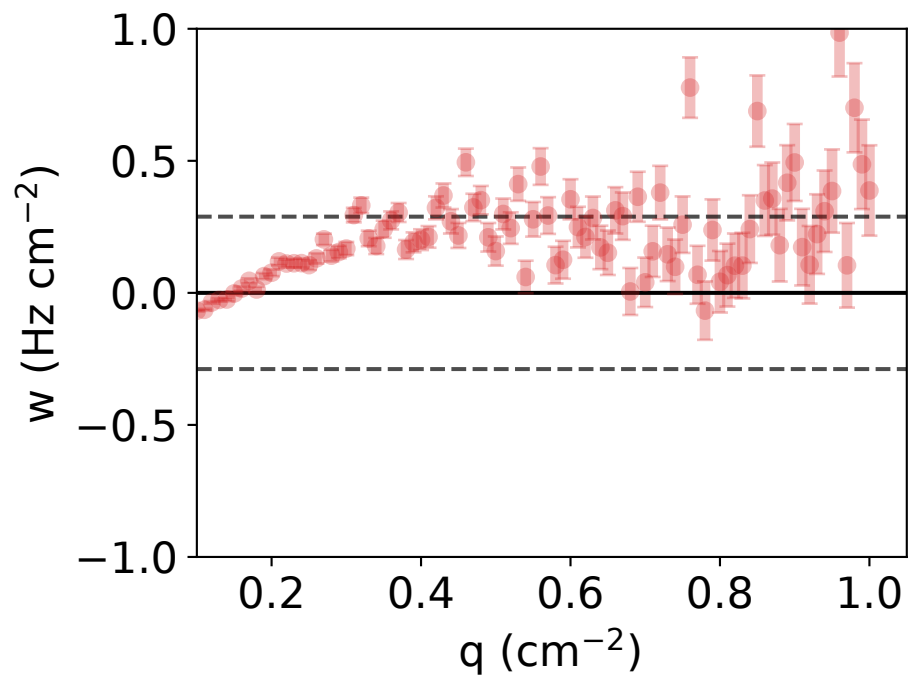
$\nu = 1.650 \pm 0.014$, $M = 16.926 \pm 0.606$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.295 Hz/cm²



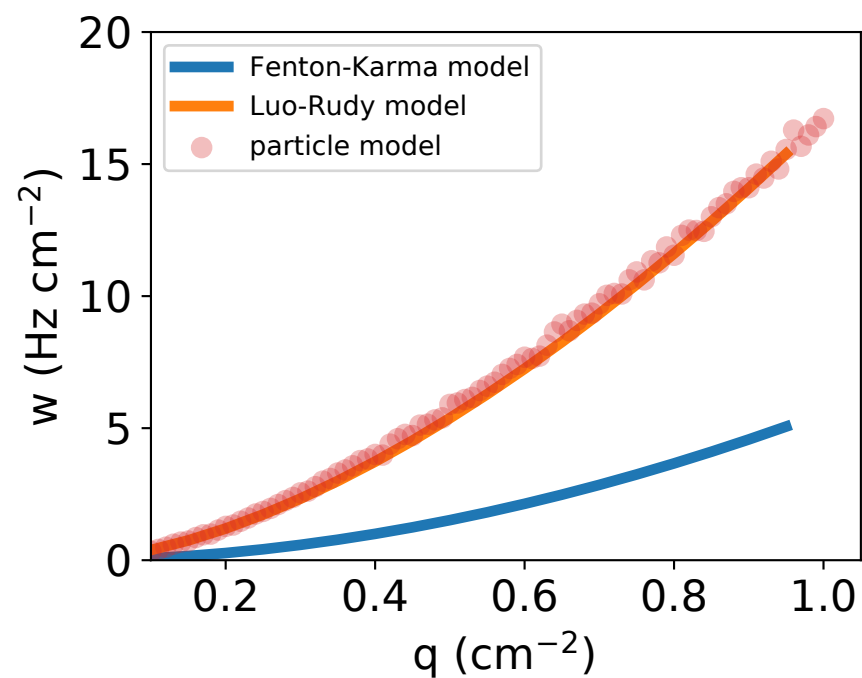
force_code=2, neighbors=0, reflect=0
 $r = 0.18021$ cm, $\kappa = 250.00000$ Hz
 $D = 0.45425$ cm²/s, $a = 10.44610$ cm²/s, $x_0 = 0$ cm



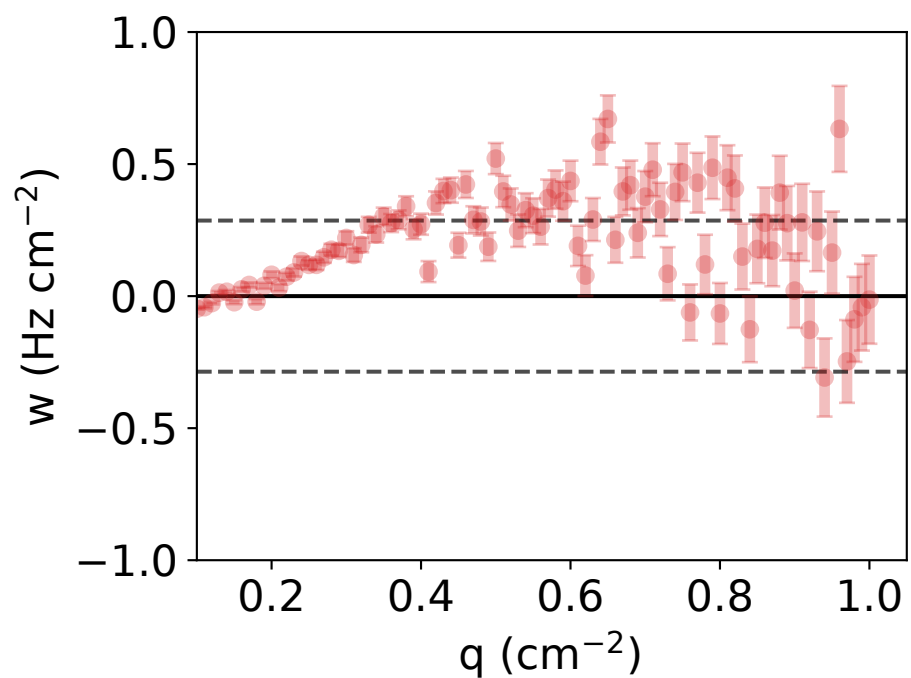
$\nu = 1.648 \pm 0.015$, $M = 16.881 \pm 0.648$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.289 Hz/cm²



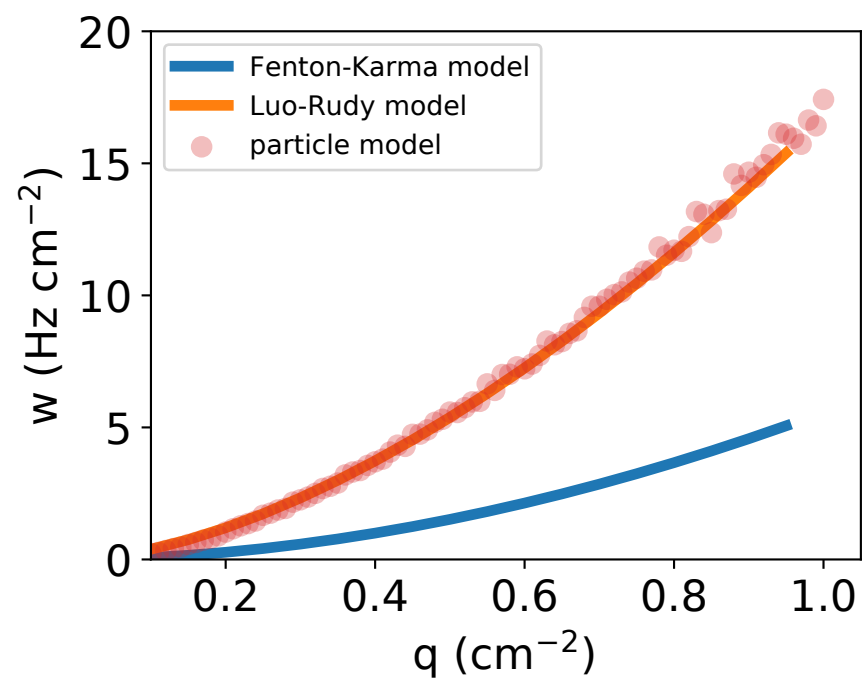
force_code=2, neighbors=0, reflect=0
 $r = 0.09839$ cm, $\kappa = 561.06100$ Hz
 $D = 0.00000$ cm²/s, $a = 15.76150$ cm²/s, $x_0 = 0$ cm



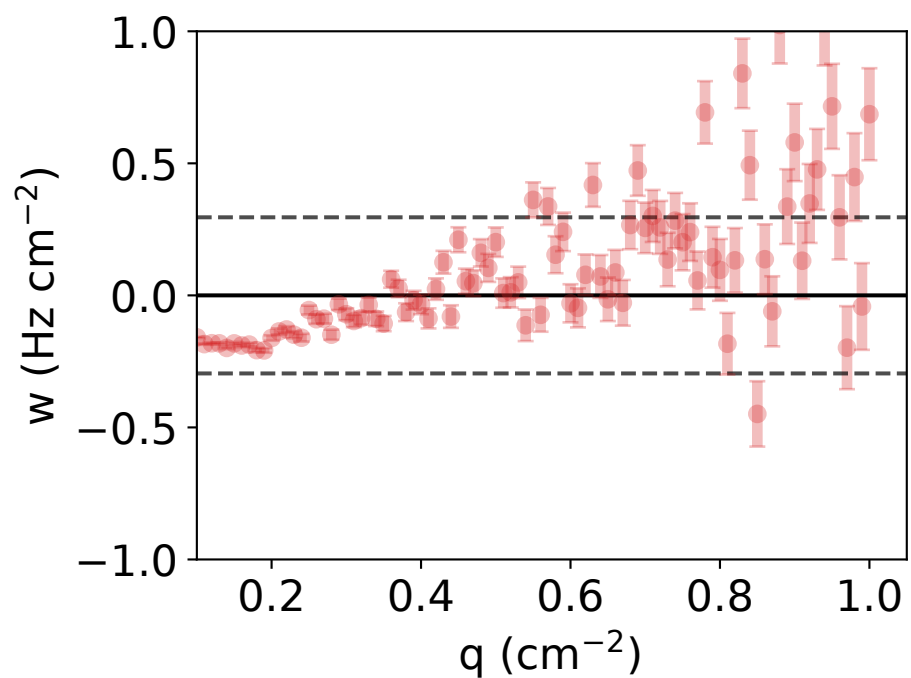
$\nu = 1.639 \pm 0.014$, $M = 16.699 \pm 0.612$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.286 Hz/cm²



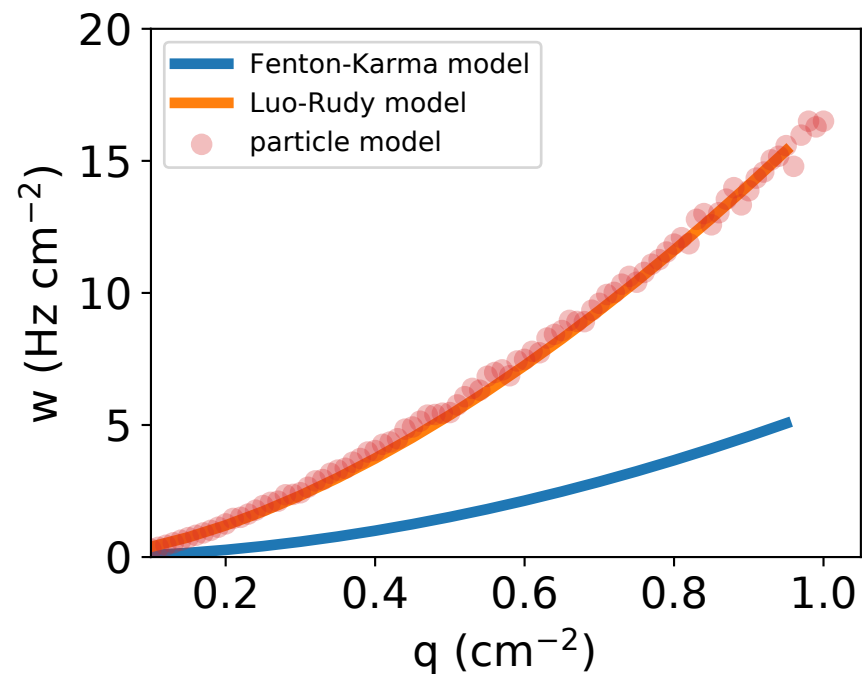
force_code=2, neighbors=0, reflect=0
 $r = 0.10763$ cm, $\kappa = 678.43700$ Hz
 $D = 0.27865$ cm²/s, $a = 6.32822$ cm²/s, $x_0 = 0$ cm



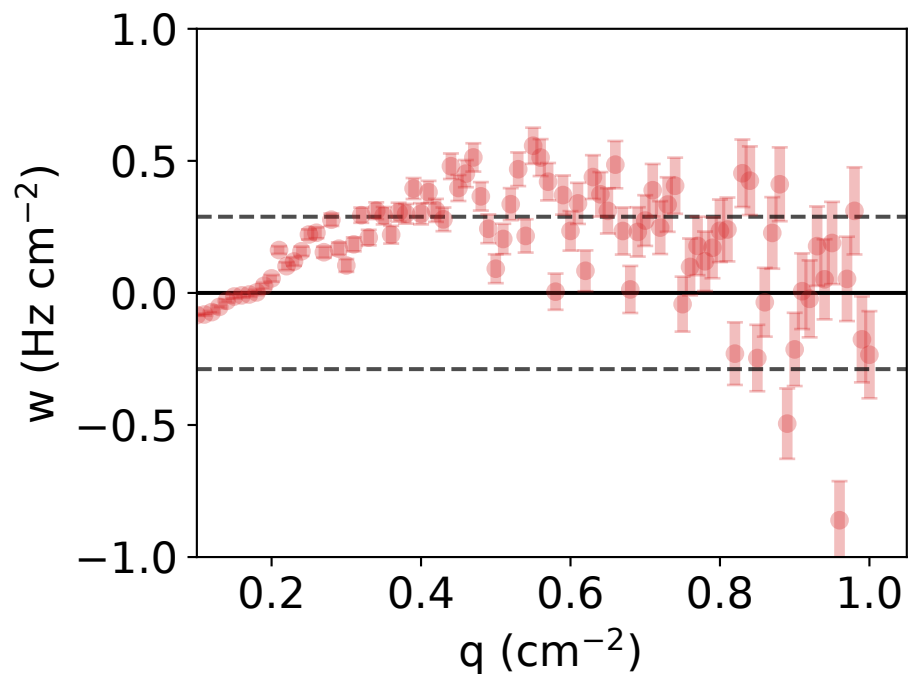
$\nu = 1.805 \pm 0.023$, $M = 17.041 \pm 0.983$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.296 Hz/cm²



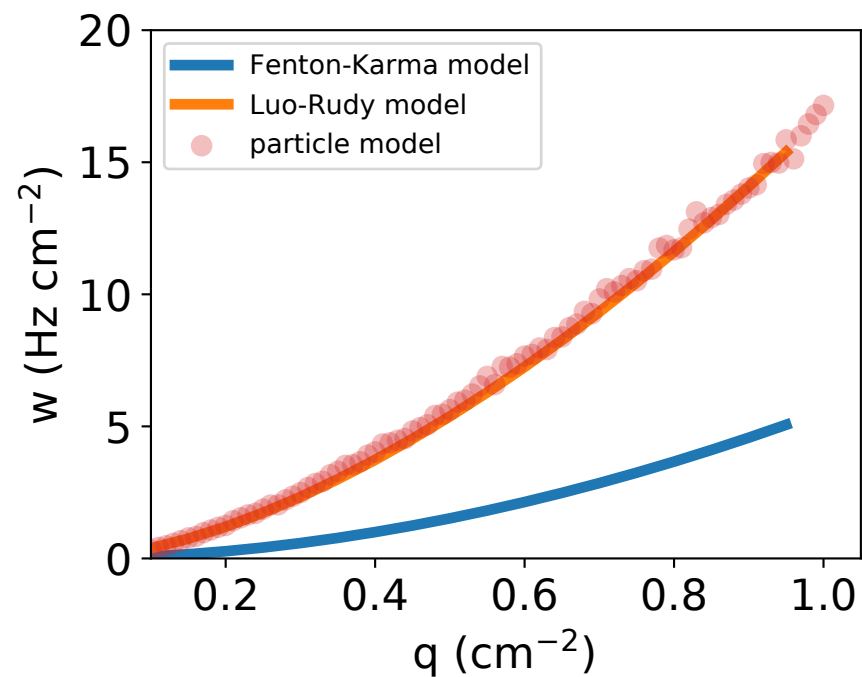
force_code=2, neighbors=0, reflect=0
 $r = 0.11066$ cm, $\kappa = 496.87500$ Hz
 $D = 0.59063$ cm²/s, $a = 8.93092$ cm²/s, $x_0 = 0$ cm



$\nu = 1.651 \pm 0.021$, $M = 16.433 \pm 0.870$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.289 Hz/cm²



force_code=2, neighbors=0, reflect=0
 $r = 0.16100$ cm, $\kappa = 297.22900$ Hz
 $D = 0.12216$ cm²/s, $a = 10.70460$ cm²/s, $x_0 = 0$ cm



$\nu = 1.636 \pm 0.015$, $M = 16.678 \pm 0.664$ cm²($\nu - 1$)/s
RMSE_{particle vs full} = 0.291 Hz/cm²

