Terminal Velocity vs. Bead Radius

- - - Theoretical Scaling: $v_{term} = (2.31 \pm 0.09)r^2$ ($\chi^2_\nu = 72.33$)
- - - Quadratic Fit: $v_{term} = (1.73 \pm 0.09)r^2 + (0.90 \pm 0.22)r + (-0.20 \pm 0.13)$ ($\chi^2_\nu = 1.01$)
Derived Terminal Velocities of Beads

Theoretical Scaling Residuals

Quadratic Fit Residuals

Terminal Velocity (mm/s)

Bead Radius (mm)