Radial one-body densities 0.200 Interacting Non interacting 0.175 Ideal 0.150 0.125 0.100 0.075 0.050 0.025 0.000 0.0 0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0  $|\mathbf{r}|$