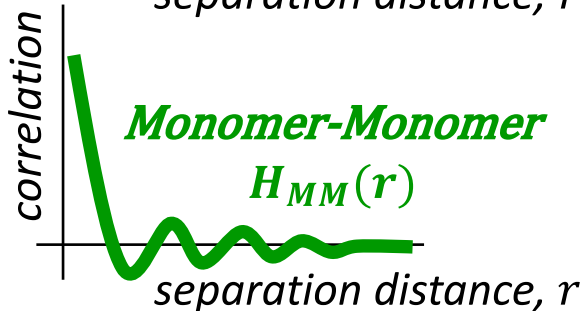
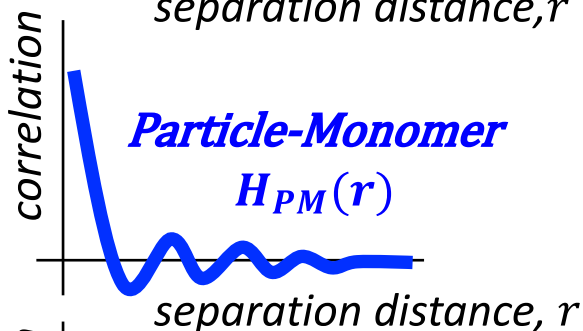
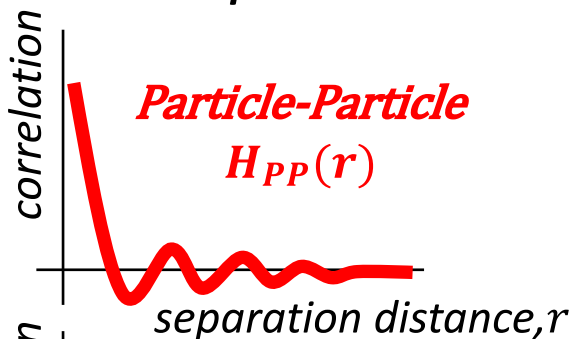


Pair-Function Representation



MatrixArray Representation

$$\begin{bmatrix} H_{PP}(\mathbf{r}_1) & H_{PM}(\mathbf{r}_1) \\ H_{PM}(\mathbf{r}_1) & H_{MM}(\mathbf{r}_1) \\ H_{PP}(\mathbf{r}_2) & H_{PM}(\mathbf{r}_2) \\ H_{PM}(\mathbf{r}_2) & H_{MM}(\mathbf{r}_2) \\ \vdots & \vdots \\ H_{PP}(\mathbf{r}_N) & H_{PM}(\mathbf{r}_N) \\ H_{PM}(\mathbf{r}_N) & H_{MM}(\mathbf{r}_N) \end{bmatrix}$$