$$\mathcal{P} = \cap_{i=1}^{n} h_i \,, \tag{1}$$

$$h_i = \{(x,\, y,\, z)\,, \text{where}\, a_i x + b_i y + c_i z + d_i \leq 0\}\;. \tag{2}$$

$$\text{for all } \boldsymbol{v} \in \mathcal{P}_A \quad : \quad a_s v_x + b_s v_y + c_s v_z + d_s \leq 0 \tag{3}$$
$$\text{for all } \boldsymbol{v} \in \mathcal{P}_B \quad : \quad a_s v_x + b_s v_y + c_s v_z + d_s \geq 0 \tag{4}$$

$$q' \in \mathcal{P}'_q \rightarrow \boldsymbol{q} = (a'/d',\, b'/d',\, c'/d') \tag{5}$$

$$\sigma_{ij} = \frac{1}{V} \sum_c l_i^{(c)} F_j^{(c)} \,, \tag{6}$$

$$||AB||_p = \min_{k_1,\ldots,k_{N_{var}}} \left(\sqrt{\sum_{i=1}^{N_{var}} [d_i + k_i]^2} \right) = \sqrt{\min_{k_1,\ldots,k_{N_{var}}} \left(\sum_{i=1}^{N_{var}} [d_i + k_i]^2 \right)} = \sqrt{\sum_{i=1}^{N_{var}} \min_{k_i} \left([d_i + k_i]^2\right)} \,, \tag{7}$$

$$k_i = \begin{cases} -1 & \text{if } d_i^{(AB)} > 0.5 \\ 0 & \text{if } d_i^{(AB)} \in \langle -0.5,\, 0.5 \rangle \\ 1 & \text{if } d_i^{(AB)} < -0.5. \end{cases} \tag{8}$$

$$\boldsymbol{H}(\boldsymbol{x}) = F_H^{-1}(\Phi(\widehat{\boldsymbol{H}}(\boldsymbol{x})))\,, \tag{9}$$

$$\widehat{\boldsymbol{H}}^c(\boldsymbol{x}) = \sum_{k=1}^{K} \frac{\xi_k^c}{\sqrt{\lambda_k}} \boldsymbol{\psi}_k^T \boldsymbol{C}_{xg} \,, \tag{10}$$

$$F_o = \max\left(\frac{|\bar{A}_c^{\text{exp}} - A_c^{\text{sim}}|}{\bar{A}_c^{\text{exp}}}, \frac{|\bar{P}_c^{\text{exp}} - P_c^{\text{sim}}|}{\bar{P}_c^{\text{exp}}} \right) \text{ for } c \in \{\texttt{Aa}, \texttt{Ba}, \texttt{Ca}, \texttt{Da}\}\;. \tag{11}$$

$$\begin{gathered} G_n\left(x\right) = \mathrm{P}\left(Q_n^* \leq x\right) = \sum_{k=1}^{n} \left(-1\right)^{k+1} \binom{n}{k} \left[F\left(x\right)\right]^k G_{n-k}\left(\tfrac{n\,x}{n-k}\right), \\ \text{kde } G_1\left(x\right) \equiv F\left(x\right),\, G_0\left(x\right) \equiv 1 \text{ a} \binom{n}{k} = \frac{n!}{(n-k)!\;k!} \end{gathered} \tag{12}$$

$$p^A = \int_0^{\frac{\pi}{2}} \int_{-\frac{L}{2}+\delta}^{\frac{L}{2}+\delta} \frac{\sin\varphi}{L} \, \mathbf{1}_A \left(\frac{\ell}{2} \cos\varphi - |x| \right) \mathrm{d}x \mathrm{d}\varphi \tag{13}$$

$$\left\{ \bar{\boldsymbol{R}}_{12} \right\} = \left\{ \begin{array}{c} \bar{X}_{12} \\ \bar{Z}_{12} \\ \bar{M}_{12} \\ \bar{X}_{21} \\ \bar{Z}_{21} \\ \bar{M}_{21} \end{array} \right\} = \left\{ \begin{array}{c} 0.5 \\ 10 \\ 20 \\ 6 \\ 8.5 \\ 11 \end{array} \right\} [\mathrm{N}] \tag{14}$$