$$P(d)$$

$$ds_{\mathbb{SH}}$$

$$iI$$

$$Sym(d, \mathbb{R})$$

$$ds_{\mathbb{SH}}^{2}(Z) = 2 \operatorname{tr} \left(Y^{-1} dZ Y^{-1} d\bar{Z} \right)$$

$$\rho_{\mathbb{SH}}(Z_{1}, Z_{2}) = \sqrt{\sum_{i=1}^{d} \log^{2} \left(\frac{1 + \sqrt{r_{i}}}{1 - \sqrt{r_{i}}} \right)}$$

$$r_{i} = \lambda_{i} \left(R(Z_{1}, Z_{2}) \right)$$

$$R(Z_{1}, Z_{2}) := (Z_{1} - Z_{2})(Z_{1} - \bar{Z}_{2})^{-1}(\bar{Z}_{1} - \bar{Z}_{2})(\bar{Z}_{1} - \bar{Z}_{2})^{-1}$$