

$$\mathcal{C} := \frac{1}{n} \sum_{i=1}^n \int_{\mathrm{SO}(3)} (R \cdot \Phi^{(i)} - \Phi_{\mathrm{mean}}) \otimes \overline{(R \cdot \Phi^{(i)} - \Phi_{\mathrm{mean}})} dR .$$