

APPLICATIONS IN CLASSICAL MECHANICS

First representation of non-Hamiltonian systems
with an IsoAction Principle

$$\begin{aligned}\hat{\delta}\hat{\mathbf{A}} &= \hat{\delta} \int_{t_1}^{t_2} (\hat{\mathbf{p}}_k \hat{\times} \hat{\mathbf{d}}\hat{\mathbf{r}}^k - \hat{\mathbf{H}} \hat{\times} \hat{\mathbf{d}}\hat{\mathbf{t}}) = \\ &= \hat{\delta} \int_{t_1}^{t_2} [\mathbf{p}_k \times \hat{\mathbf{T}}_i^k(\mathbf{t}, \mathbf{r}, \mathbf{p}, \dots) \times \hat{\mathbf{d}}\hat{\mathbf{r}}^i - \hat{\mathbf{H}} \times \hat{\mathbf{T}}_{\hat{\mathbf{t}}} \times \mathbf{d}\hat{\mathbf{t}}] = 0\end{aligned}$$