

$$\text{dof } \mathcal{H}^i: \mathcal{H}^i \in {}^N\mathbb{R} \times {}^N_d\mathbb{R}$$

$$x^\nu: \mathcal{H}^i: \mathcal{H}^i \in \mathbb{R}^d \times {}^N\mathbb{R} \times {}^N_d\mathbb{R} \xrightarrow[\text{Lagrangian}]{\mathcal{L}} \mathbb{R} \ni \boxed{\mathcal{H}^i: \mathcal{H}^i}$$

$$\begin{matrix} x \\ \mu \end{matrix} \boxed{\mathcal{H}^i: \mathcal{H}^i}$$

$$\begin{matrix} x \\ i \end{matrix} \boxed{\mathcal{H}^i: \mathcal{H}^i}$$

$$\begin{matrix} x \\ i \end{matrix} \boxed{\mathcal{H}^i: \mathcal{H}^i}^\mu$$