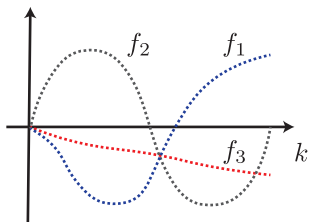


## Observables

$$f_i(x_k, u_k) = \alpha_i^T \psi(x_k, u_k)$$



Linear SysId

## Infinite Dimensional Representation

dynamics

$$\dot{f} = Lf$$

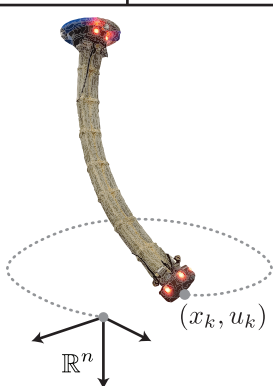
flow map

$$U^t f = f \circ \phi^t$$

$$L = F \cdot \nabla_x$$

Lifting

$$\psi(\cdot, \cdot)$$



Nonlinear SysId

dynamics

$$\dot{x} = F(x, u)$$

flow map

$$\phi^t(x, u)$$

## State Measurements

## Finite Dimensional Representation