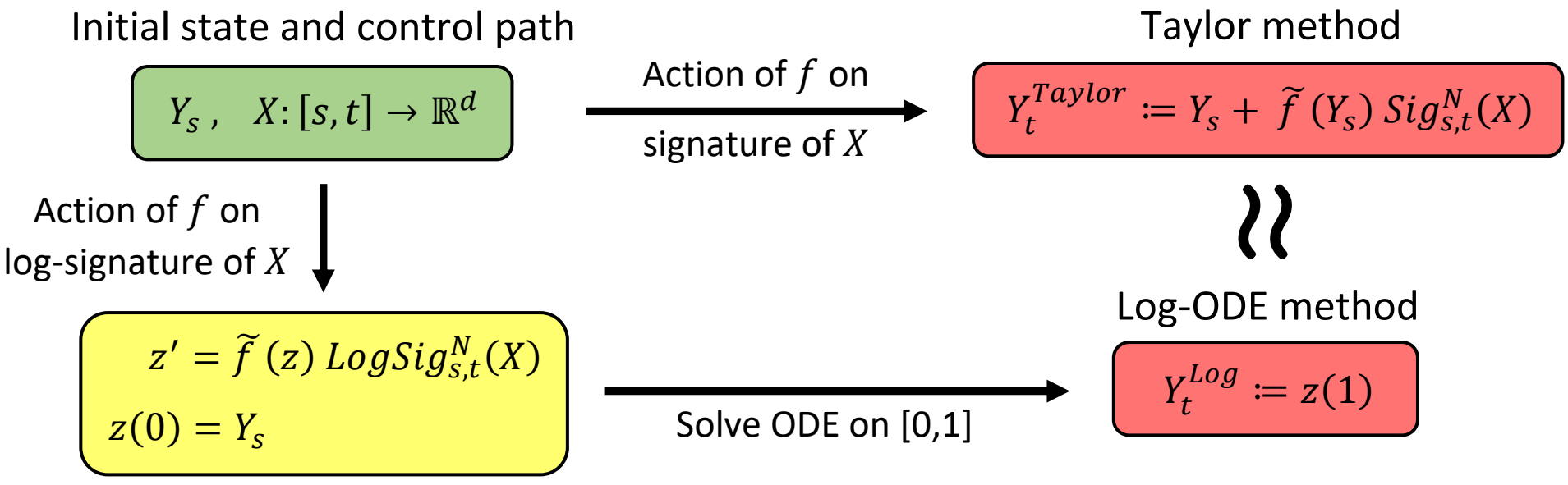
Initial state and control path
$Y_s\,,\quad X\colon [s,t] \to \mathbb{R}^d$
Action of f on
signature of X
Taylor method
$Y_t^{Taylor} := Y_s + \widetilde{f}\,(Y_s)\, Sig_{s,t}^N(X)$
Action of f on
log-signature of X
$z' = \widetilde{f}\,(z)\, LogSig_{s,t}^N(X)$
$z(0) = Y_s$
Solve ODE on [0,1]
Log-ODE method
$Y_t^{Log} := z(1)$