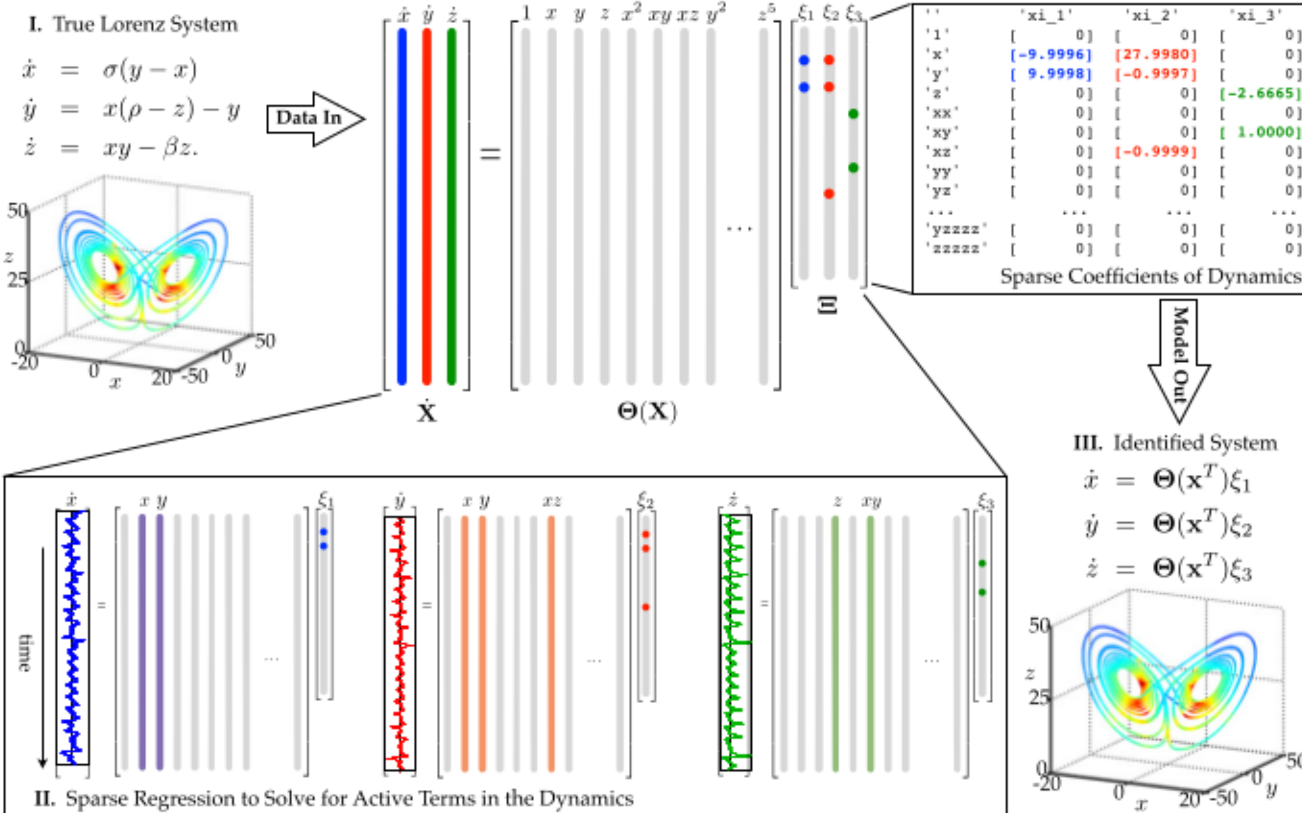

I. True Lorenz System
ẋ = σ(y − x)
ẏ = x(ρ − z) − y
ż = xy − βz.
Data In
Ẋ
Θ(X)
Ξ
1 x y z x² xy xz y² z⁵
ξ1 ξ2 ξ3
'' 'xi_1' 'xi_2' 'xi_3'
'1' [0] [0] [0]
'x' [-9.9996] [27.9980] [0]
'y' [9.9998] [-0.9997] [0]
'z' [0] [0] [-2.6665]
'xx' [0] [0] [0]
'xy' [0] [0] [1.0000]
'xz' [0] [-0.9999] [0]
'yy' [0] [0] [0]
'yz' [0] [0] [0]
... ...
'yzzzz' [0] [0] [0]
'zzzzz' [0] [0] [0]
Sparse Coefficients of Dynamics
Model Out
III. Identified System
ẋ = Θ(xᵀ)ξ1
ẏ = Θ(xᵀ)ξ2
ż = Θ(xᵀ)ξ3
time
II. Sparse Regression to Solve for Active Terms in the Dynamics