a)
Method
b)
Summary
Inferrable trajectory types
Aggregated scores per experiment
Priors required
Wrapper type
Platform
Topology inference
Cycle
Linear
Bifurcation
Multifurcation
Tree
Connected
Disconnected
Overall
Accuracy
Scalability
Stability
Usability
Graph methods
PAGA × Direct Python Free
RaceID / StemID Proj R Free
SLICER × Cell R Free
Tree methods
Slingshot Direct R Free
MST Proj R Free
pCreode Proj Python Free
SCUBA Cluster Python Free
Monocle DDRTree Cell R Free
Monocle ICA × Cell R Param
cellTree maptpx Cell R Free
SLICE Direct R Free
cellTree VEM Cell R Free
ElPiGraph Direct R Free
Sincell Cell R Free
URD × Direct R Free
CellTrails Cell R Free
Mpath ✖ Cluster R Free
CellRouter × Cell R Free
Multifurcation methods
STEMNET ✖ Prob R Param
FateID ✖ Prob R Param
MFA × Prob R Param
GPfates × Prob Python Param
Bifurcation methods
DPT Direct R Fixed
Wishbone × Direct Python Param
Linear methods
SCORPIUS Linear R Fixed
Component 1 Linear R Fixed
Embeddr Linear R Fixed
MATCHER Linear Python Fixed
TSCAN Linear R Fixed
Wanderlust × Linear Python Fixed
PhenoPath Linear R Fixed
topslam × Linear Python Fixed
Waterfall Linear R Fixed
ElPiGraph linear Direct R Fixed
ouijaflow Linear Python Fixed
FORKS Linear Python Fixed
Cyclic methods
Angle Cyclic R Fixed
ElPiGraph cycle Direct R Fixed
reCAT Cyclic R Fixed
Off-the-shelf
Off-the-shelf
Off-the-shelf
Prior information required
None
× Weak: Start or end cells
✖ Strong: Cell grouping or time course
Not shown, insufficient data points
CALISTA
cellTree Gibbs
GrandPrix
MERLoT
ouija
pseudogp
SCIMITAR
SCOUP