

a)	Method											b)	Summary				
	Inferable 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	×	Traj	Python	Free													
RaceID / StemID		Proj	R	Free													
SLICER	×	Cell	R	Free													
Tree methods																	
Slingshot		Traj	R	Free													
MST		Proj	R	Free													Off-the-shelf
pCreode		Proj	Python	Free													
SCUBA		Cluster	Python	Free													
Monocle DDRTree		Cell	R	Free													
Monocle ICA	×	Cell	R	Param													
cellTree maptpx		Cell	R	Free													
SLICE		Traj	R	Free													
cellTree VEM		Cell	R	Free													
EIPiGraph		Traj	R	Free													
Sincell		Cell	R	Free													
URD	×	Traj	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		Traj	R	Fixed													
Wishbone	×	Traj	Python	Param													
Linear methods																	
SCORPIUS		Linear	R	Fixed													
Component 1		Linear	R	Fixed													Off-the-shelf
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													
EIPiGraph linear		Traj	R	Fixed													
ouijaflow		Linear	Python	Fixed													
FORKS		Linear	Python	Fixed													
Cyclic methods																	
Angle		Cycle	R	Fixed													Off-the-shelf
EIPiGraph cycle		Traj	R	Fixed													
reCAT		Cycle	R	Fixed													

Prior information required

None

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 Weak: Start or end cells

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 Strong: Cell grouping or time course