9th bwHPC Symposium



Contribution ID: 181 Type: Poster

cellular_raza - Novel Flexibility in Design of Agent-Based Models in Cellular Systems

Monday, October 23, 2023 12:20 PM (10 minutes)

Agent-Based Models (ABMs) allow researchers to describe complex cellular systems in a mechanistic manner but can also abstract over less-known processes.

It is often desirable to exchange only parts of the model eg. changing the spatial representation of cells from a spherical interaction potential to an elliptical.

Existing tools lack in flexibility and cannot change their internal representation of cells.

To solve these problems we created cellular_raza, a novel library that offers previously unknown flexibility in model design while retaining excellent performance.

Authors: PLEYER, Jonas; Dr FLECK, Christian

Session Classification: Poster Session

Track Classification: Biology, Medical Science, Computational Humanities, and Soft Matter