Kinetic Simulation Algorithm Ontology

Dagmar Waltemath, Anna Zhukova,
Nick Juty, Camille Laibe and
Nicolas Le Novère

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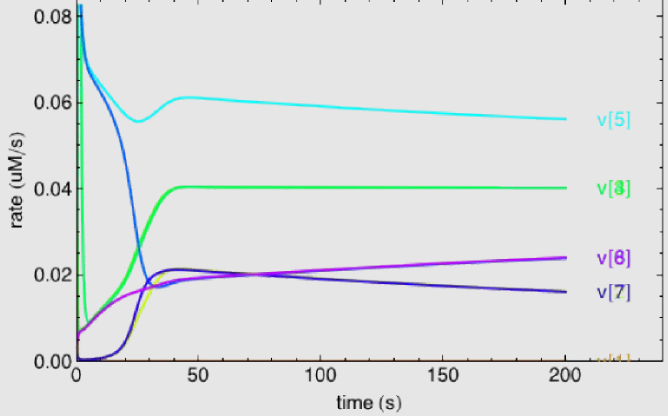
EMBL-EBI



Modeling

Simulation

- Algorithm used
- Initial set-up

Numerical Results

KiSAO

SED ML

MIASE

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KiSAO 2.0 vs 1.0

KiSAO 1.0 (OBO)

- algorithm using adaptive timesteps
  - Bortz-Kalos-Liebowitz method
  - tau-leaping method
- algorithm using discrete variables
  - tau-leaping method
  - deterministic cellular automata
- algorithm using stochastic rules
  - tau-leaping method

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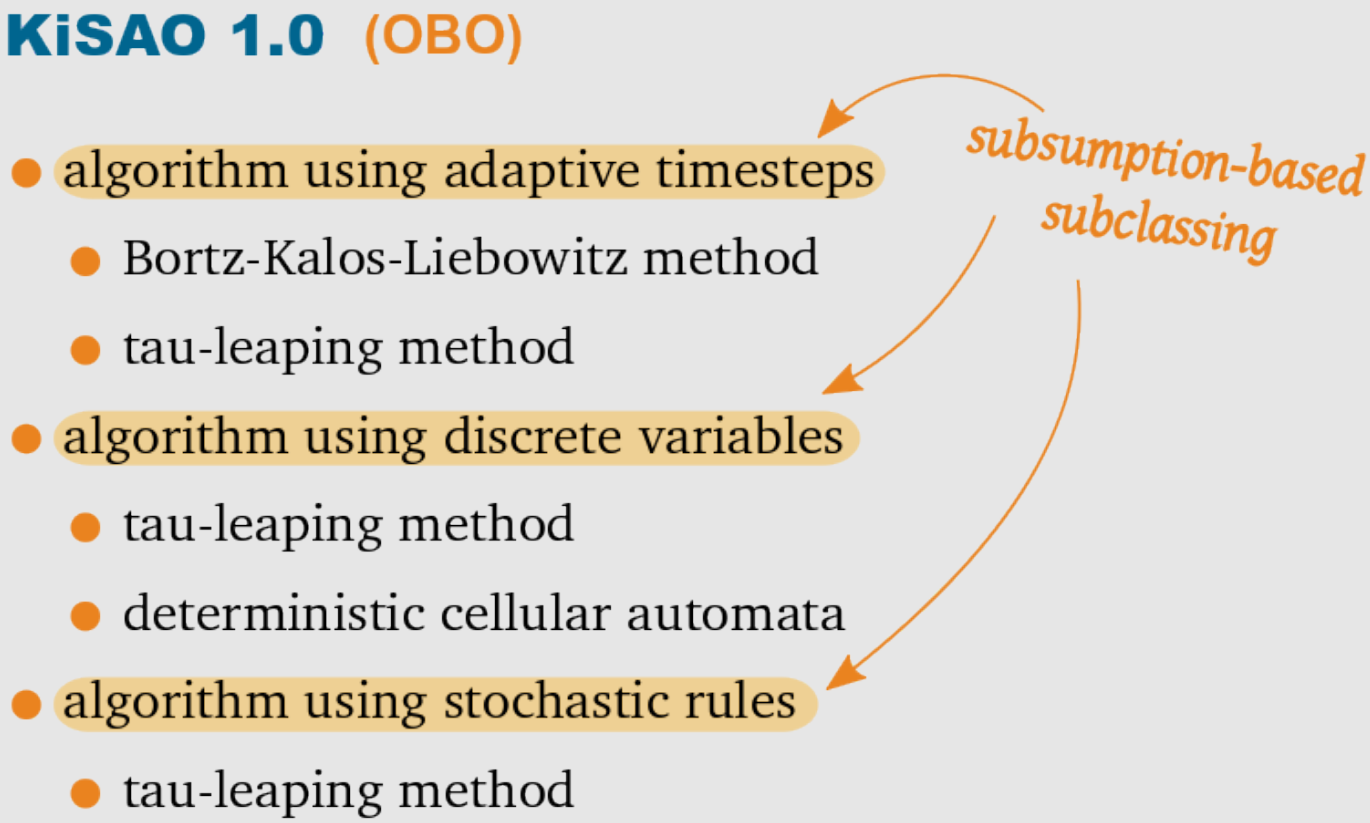

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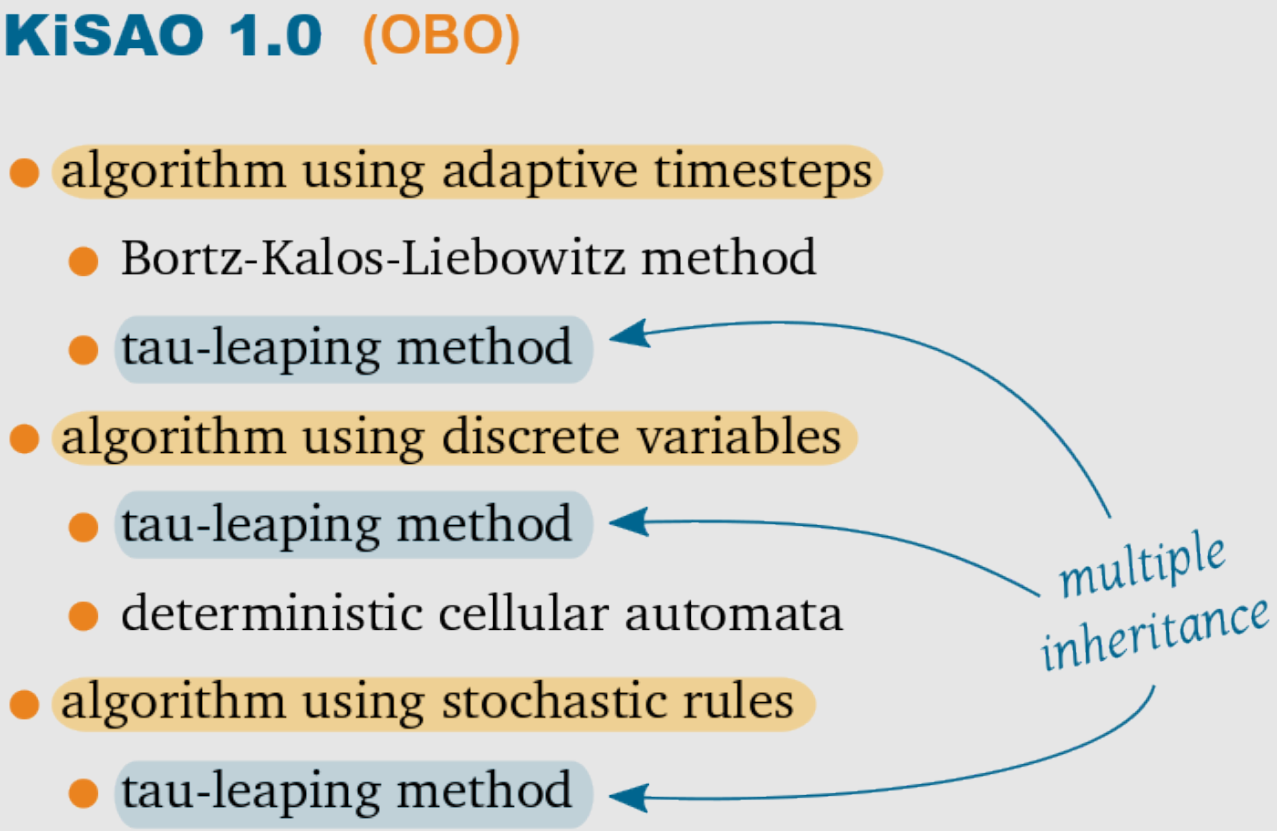

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more methods

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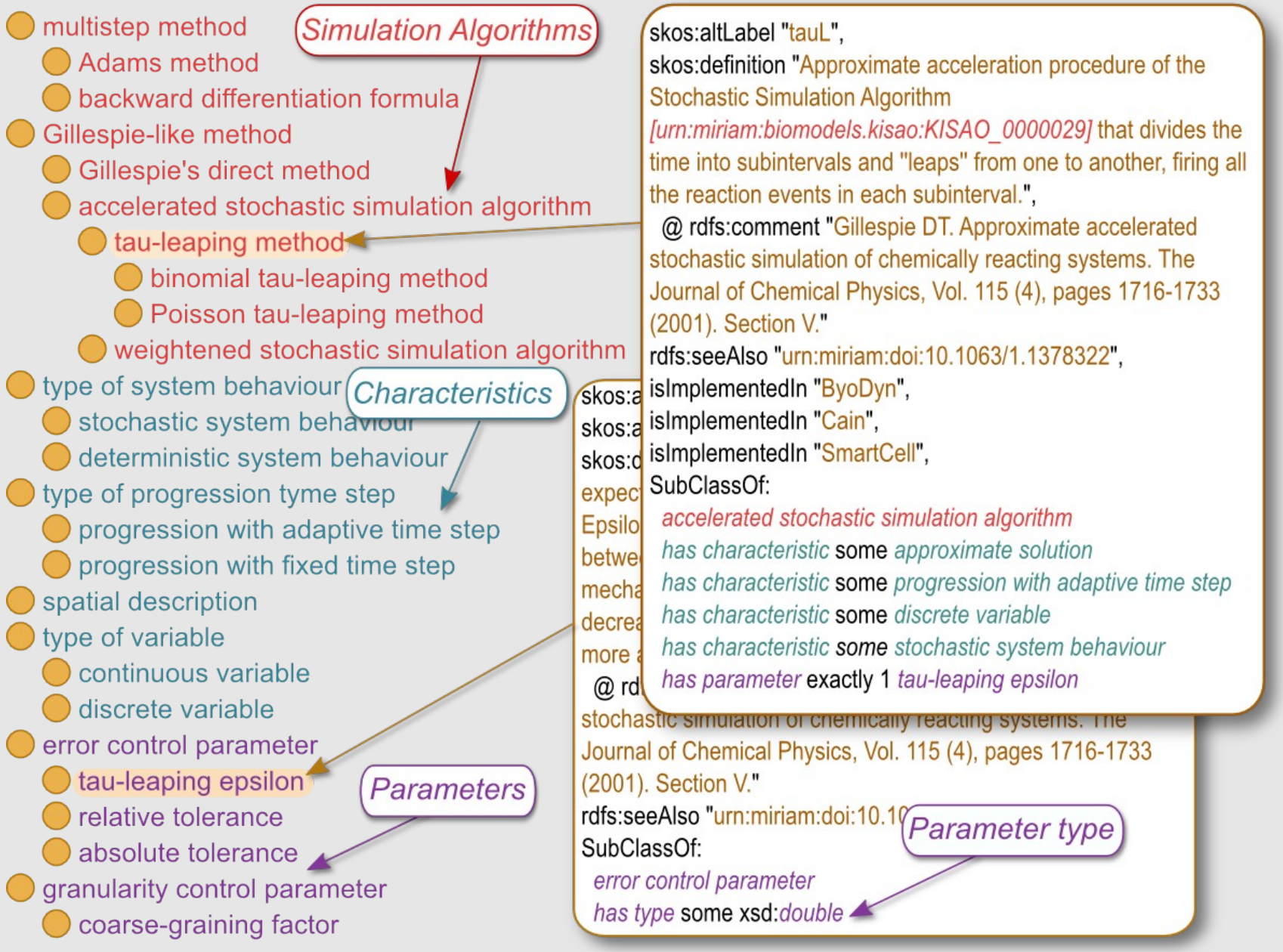
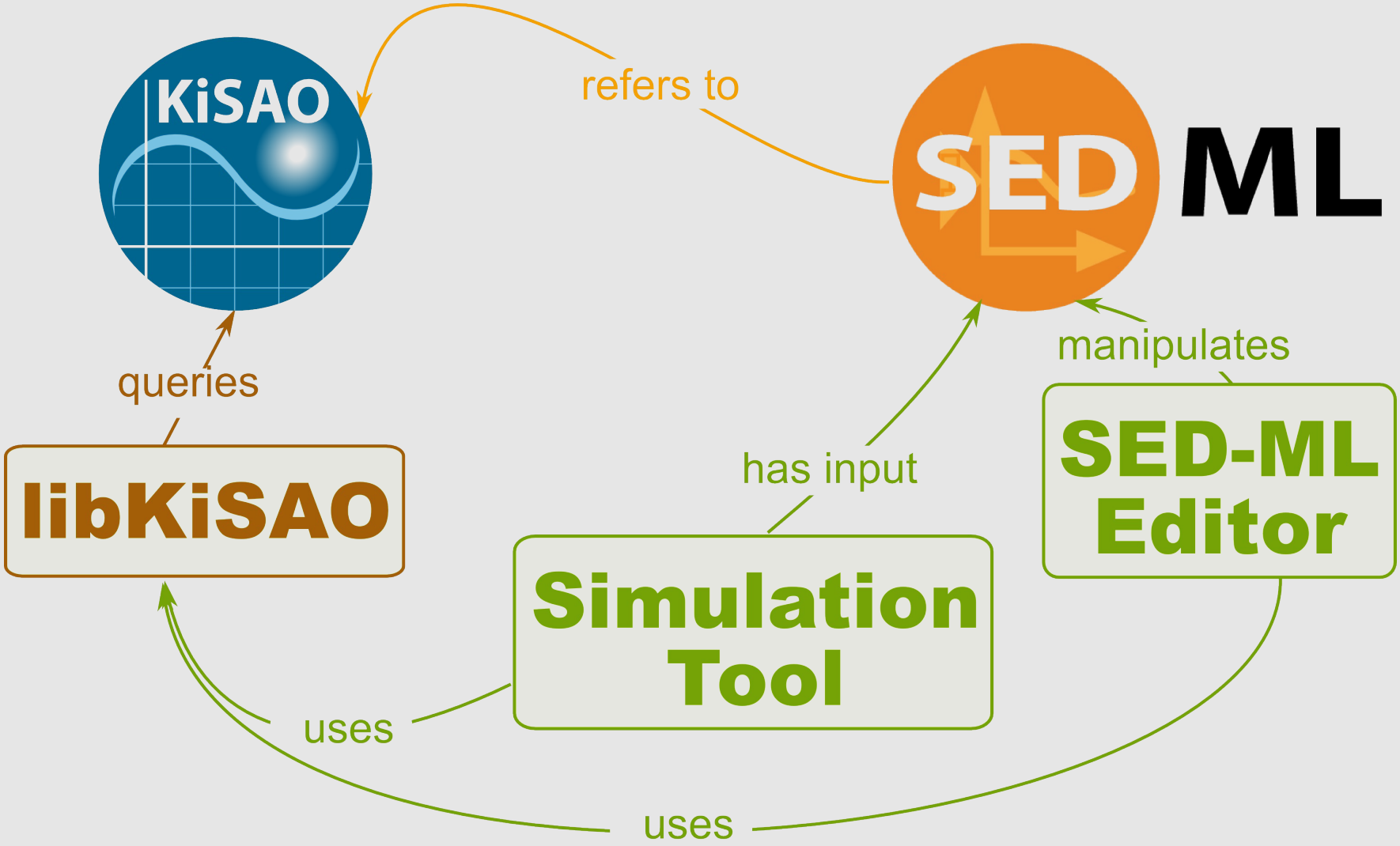
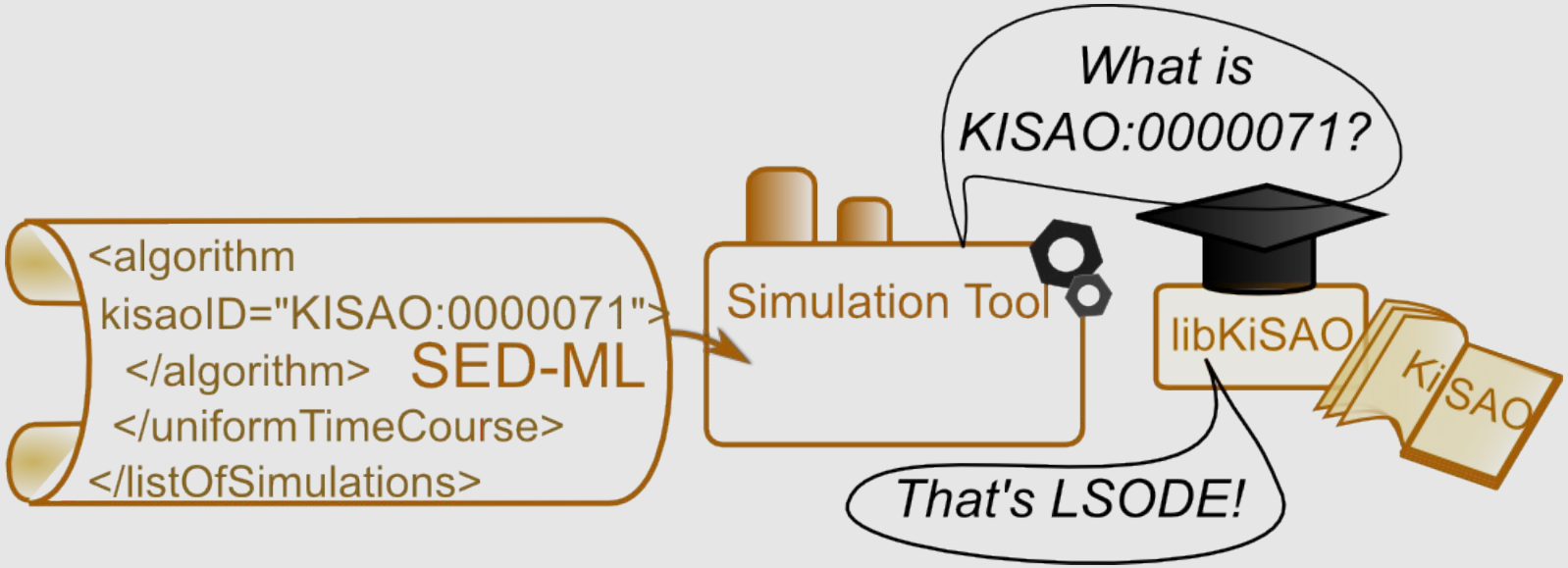




Use Case: libKiSAO and Simulation Tools



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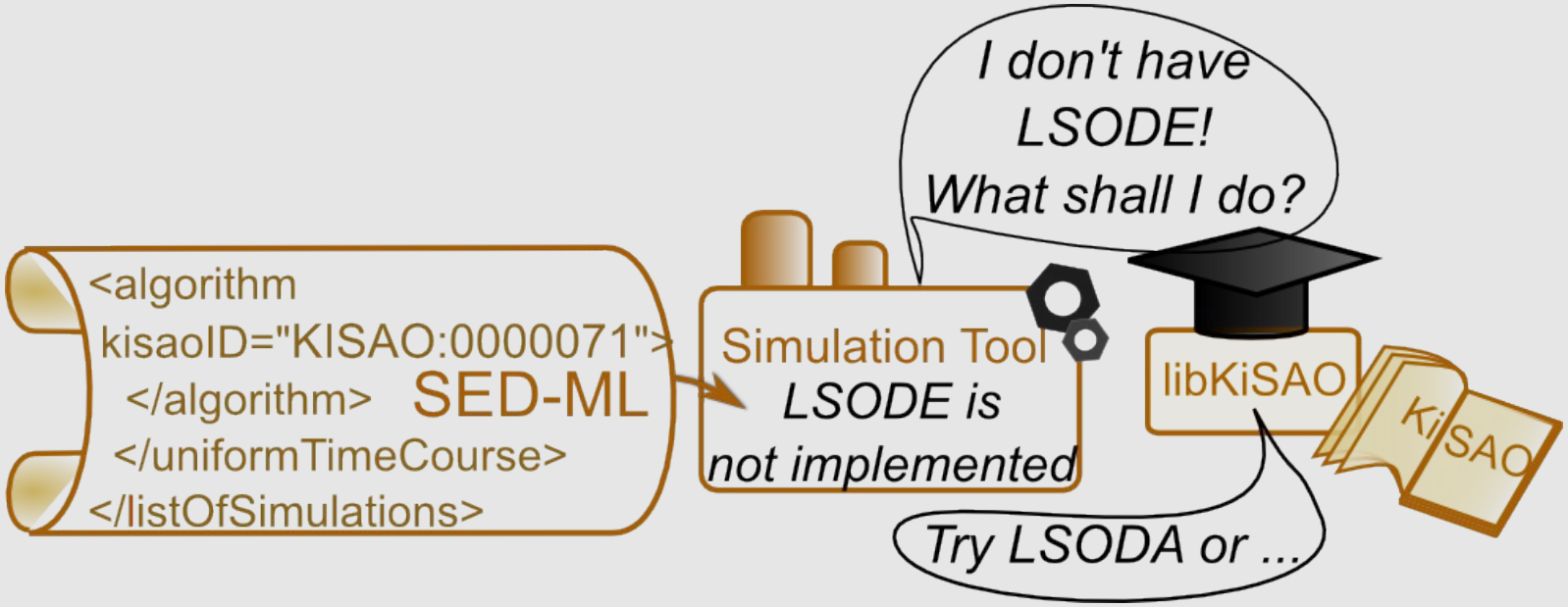
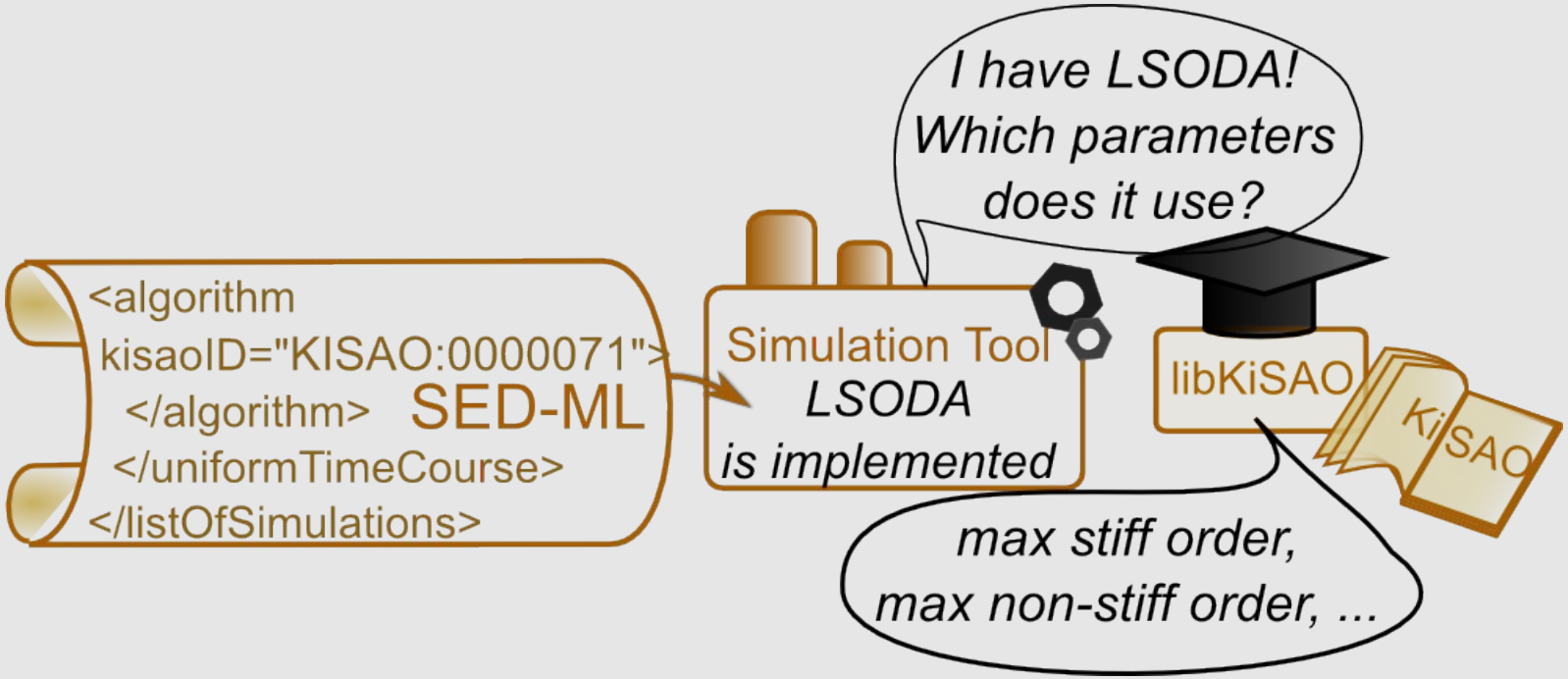
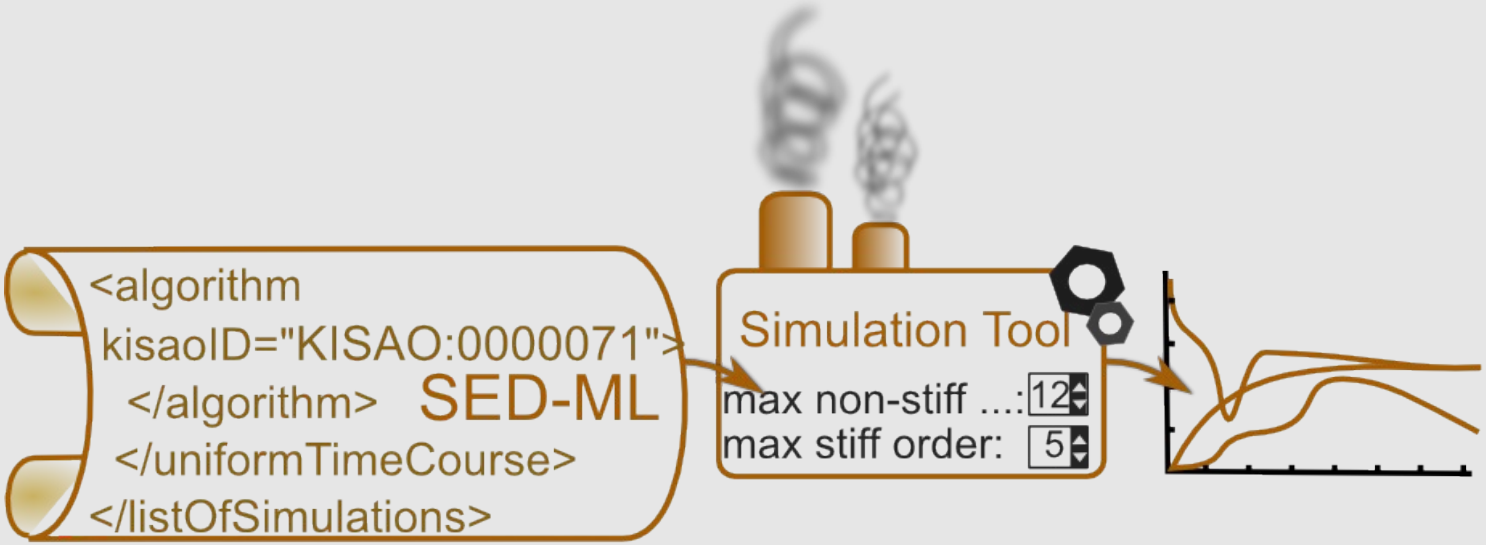


Use Case 2: libKiSAO and Simulation Tools



Use Case: libKiSAO and Simulation Tools



Acknowledgments

KiSAO

Dagmar Waltemath, Anna Zhukova, Nick Juty, Camille Laibe, Nicolas Le Novère

libKiSAO

Anna Zhukova, Richard Adams, Camille Laibe, Nicolas Le Novère

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http://biomodels.net/kisao

- Download
- libKiSAO
- Suggest terms
- Submit bugs

zhutchok@ebi.ac.uk (Anna Zhukova)