# DiSCourse Seminar

The Institute of Molecular Biology and the Digital Science Center
would like to invite you to the following presentation by our guest speaker:

# Dr. Simon Olsson

## Freie Universität Berlin

### "Machine Learning in the Biomolecular Sciences"

As experiments and simulation methods are generating increasing amounts of data, we are facing a data deluge -- in this data, however, lies the potential to uncover new biology, so developing new methods to navigate and analyze such data effectively is critical. In this talk, Simon Olsson will briefly outline the possibilities of machine learning in this space, and give a handful of recent examples from his research targeting outstanding problems in molecular simulation and statistical mechanics.

*Selected references:*
*Noé F, Olsson S, Köhler J, Wu H., Boltzmann generators: Sampling equilibrium states of many-body systems with deep learning. Science. 2019 Sep 6;365(6457).*
*Olsson S, Noé F., Dynamic graphical models of molecular kinetics. Proc Natl Acad Sci U S A. 2019 Jul 23;116(30):15001-15006.*

Date and Time: Wednesday, 8 January 2020, 4 pm

Place:          Digital Science Center, Ursulinenpassage, Innrain 15, open space area (1st floor)

**Guests are welcome!**

Contact: Justus.Piater@uibk.ac.at    or:  Frank.Edenhofer@uibk.ac.at