## Workshop Machine Learning in Population Genetics 29.01.2025

## What to Bring:

Your laptop, time and curiosity, a good mood, (and maybe a multi-plug).

There will be coffee and snacks available throughout the day.

Feel free to bring your favorite coffee mug.

**Location:** Maria von Linden Str. 6, ground floor (left)

## **Schedule**

9:00 am: Doors open, informal arrival

**9:30 - 9:45 am**: welcome, introductions to Machine Learning and Population Genetic Data, and workshop overview

9:45 - 10:15 am:

• Flash talks (2 minutes each)

10:15 am: short break

10:30 - 12:00 pm:

• Session 1: Detecting Selective Sweeps with CNNs

**12:00 - 1:30 pm**: Lunch break (no lunch provided, but there are some options nearby)

1:30 - 3:00 pm:

• Session 2: Neural Posterior Estimation for Population Genetic Models

3:00 - 3:30 pm: Coffee break with pretzels and pastries

3:30 - 4:30 pm:

Discussion of current challenges and perspectives at the intersection of machine learning and biology in your research

Each of the session will consist of 15-20 min presentation and 1 h hands-on session. The sessions do not depend on each other.

**Session 3:** Hierarchical Population Structure Inference (has been canceled)