

Workshop on demographic Inference

Tjärnö, Sweden, September 11-15 2017

Sunday

Evening Solve computer issues if necessary

Monday

8:00 Breakfast
8:30 Participants show 2-3 slides about their research and interest in the workshop
10:00 Coffee break
10:30 Lecture: Popgen refresher: coalescent theory for demographic inference(Daniel)
12:00 Lunch
13:00 Lecture: Intro to Coalescent theory (Daniel)
15:00 Coffee break
15:30 Practical: simulating neutral diversity with fastsimcoal (Daniel)
17:00 Dinner
19:00 Pub in the White House

Tuesday

8:00 Breakfast
8:30 Lecture: "NGS data, uncertainties and how to deal with them" (Matteo)
10:00 Coffee break
10:30 Practical: "ANGSD and ngsTools" (Matteo)
12:00 Lunch
13:00 Practical: ANGSD and ngsTools (Matteo, continued)
14:00 Lecture: "Model-based inference: Frequentist and Bayesian" (Daniel)
15:00 Coffee break
15:30 Lecture: "Model-based inference: Frequentist and Bayesian" (Daniel, continued)
17:00 Dinner

Wednesday

8:00 Breakfast
8:30 Lecture: "Getting insights from low-depth (and ancient) DNA" (Vivian)
9:45 Coffee break
10:15 Practical: "ATLAS for recalibration, genotyping and diversity estimation" (Vivian)
12:00 Lunch
13:00 Lecture: "Intro to Composite Likelihood & ABC methods" (Daniel)
14:45 Coffee break
15:15 Practical: "Using ABCtoolbox and fastsimcoal on simple models" (Daniel)
17:00 Dinner
18:00 Walk on Saltö (led by Per Jonsson)

Thursday

- 8:00 Breakfast
- 8:30 Lecture: "ABC model choice and inference in high(er) dimensions" (Daniel)
- 9:45 Coffee Break
- 10:15 Practical: "Complex models and model choice with ABCtoolbox" (Daniel)
- 12:00 Lunch
- 13:00 Lecture: "Inferring selection with ABC and other tools" (Matteo)
- 14:45 Coffee break
- 15:15 Participants plan a demographic analysis for their own data (Daniel and Vivian)
- 17:00 Dinner
- 19:00 Pub in the White House

Friday

- 8:00 Breakfast
- 8:30 Participants conduct some first analysis on their data
- 12:00 Lunch
- 13:00 Participants conduct some first analysis on their data (continued)
- 14:45 Coffee break
- 15:15 Discussion about first impressions and solutions to encountered problems
- 17:00 Dinner