

NordicMathCovid Helsinki Workshop 2022

May 23 - 25, 2022 (Gustavelund Hotel)

Speakers of regular talks should aim for 20min talk + 10min discussion, we included some time for additional discussions in most sessions

Program:

Monday (May 23, 2022)

12:00 **Lunch**

13:00-15:00

Welcome words by Lasse (13:00-13:15)

Project talks 1 (Retrospective modeling of pandemic spread)

- Hilde Brustad & Felix Günther (UiO/SU): *Population behavior and pandemic spread of SARS-CoV-2 in Norway and Sweden*
- Meghana Kamineni (UiO): *Effects of Non-Compulsory and Mandatory COVID-19 Interventions on Travel Distance and Time Away from Home: The Case of Norway in 2021*
- Morten Johnsen (SSI): *Seasonal changes in SARS-CoV-2 spread based on Danish hospitalization and seroprevalence data*

15:00-15:30 **Coffee break**

15:30-17:30 **Projects and cooperations with public health authorities**

- Hilde Brustad (UiO): *Household secondary attack rate and vaccine efficacy of Delta and Omicron variant from Norwegian contact tracing data*
- Simopekka Vänskä (THL): *Different modeling tasks and lessons learned during the COVID-19 pandemic*
45 min talk + 45 min discussion (*opportunities for future cooperation between academia and public health authorities*)

19:00 **Dinner at the hotel terrace**, BBQ style (outdoors if good weather)

Tuesday (May 24, 2022)

9:00 Project talks 2 (Vaccination/Immunity)

- Abbas Karimi Rizi (Aalto): *Herd Immunity and Epidemic Size in Networks with Vaccination Homophily*
- Louis Yat Hin Chan (UiO): *Modeling the regional prioritization strategies of COVID-19 vaccines in Norway*
- Mohamed El Khalifi (SU): *Modelling gradual loss of immunity in epidemic models*

10:45-11:15 Coffee break

11:15 Project talks 3 (Applied mathematical modeling)

- Jørgen Eriksson Midtbø (FHI): *Modelling the emergence of Omicron in Norway using an agent-based model*
- Lasse Christiansen (SSI): *Evaluation of the Danish modeling effort” and/or “scenarios for this coming fall and winter*

12:30-13:30 Lunch

13:30-13:45 Mikko Kivelä (Aalto): *PanNordic mobility modeling overview*

13:45-15:45: Split in smaller groups to work/discuss on ongoing projects

- Group 1: Mobility modeling (theoretic mathematical models)
- Group 2: Estimation of mobility/traveler numbers based on multiple data sources
- Group 3: Inference/Implementation of multi-country epidemic model to estimate effects of cross-country traveling on reproductive number and counterfactual scenario analyses
- Additional groups on topics unrelated to mobility modeling and/or mixing between groups possible

Afternoon/Evening program:

16:00-18:00: Excursion to Lake Tuusula and Halosenniemi museum (famous Finnish romantic era artist colony; travel by bus). Bus leaves from the hotel at 16:10 and returns at around 18.

18:00-19:00: Sauna by the lake for females

19:09-20:00: Sauna by the lake for the rest

20:00 Dinner (Buffet at the sauna terrace)

Wednesday (May 24, 2022)

9:00 Project talks and group work

- Fanny Bergström (SU): *Flexible Bayesian Nowcasting -- Application to COVID-19 fatalities in Sweden*

9:30-11:15 Small-group discussion and working groups (flexible coffee break):

- Continue group meetings from Tuesday
- Other groups/discussions possible

11:15-12:30 Talks

- Gianpaolo Scalia Tomba: *Generation times*
- Tom Britton (SU): *Lockdown optimisation*
- Final words

12:30-13:30 Lunch

Formal meeting ends after lunch, meeting room is booked in the afternoon in case if some of wish to continue working together