



LUND UNIVERSITY
Faculty of Science



MCnet School 2017

Lund, Sweden, 2 – 7 July

MCnet is arranging its eleventh school in the city of Lund, Sweden, with arrival on Sunday 2 July and departure Friday afternoon 7 July.

The school provides a five-day course of training in the physics and techniques used in modern Monte Carlo event generators via a series of lectures and practical sessions. The school is aimed at advanced doctoral students and young postdocs.

Our core sessions comprise a series of introductory lectures on the physics of event generators, further lectures on a wide range of topics, a series of hands-on tutorials using all of the MCnet event generators for LHC physics, and evening discussion sessions with Monte Carlo authors. The full list of lectures is:

- **Introduction to event generators** – Peter Skands (Monash, Melbourne)
- **Matching and merging** – Stefan Höche (SLAC, Stanford)
- **Heavy-ion and cosmic-ray generators** – Klaus Werner (SUBATECH, Nantes)
- **Simulation of Beyond-the-Standard-Model physics** – Valentin Hirschi (ETH, Zürich)
- **Effective field theories** – Eleni Vryonidou (NIKHEK, Amsterdam)
- **Simulation of neutrino physics** – Costas Andreopoulos (Rutherford & Liverpool)
- **Tuning of generators** – Holger Schulz (Durham)
- **Machine learning and applications (industrial application)** – Michel Herquet (B12 Consulting, Louvain-la-Neuve)
- **Outreach** – Christina Isaxon (Lund)

Most local expenses for students are funded by the EU through the MCnetITN3 Initial Training Network: there is no registration fee, and student housing and some meals will be provided free of charge. A few travel bursaries are available for participants from Convergence Regions of the EU and others in financial need, whose participation would otherwise be prevented.

Applications must be received by **1st of May 2017**. Bursary decisions will be made after that date — students that have an urgent need for earlier information on acceptance should contact the organisers.

The school will be held at the Department of Astronomy and Theoretical Physics. With students having left for the summer break, nearby downtown Lund displays a relaxed small-city atmosphere.

Further details, including application procedures, can be found at the school homepage:

<https://indico.cern.ch/event/611360/>