

# Welcome to the MCnet machine learning school!

...held virtually from Lund, Sweden, June 22-26, 2020

Local organizers: Malin Sjödahl and Stefan Prestel

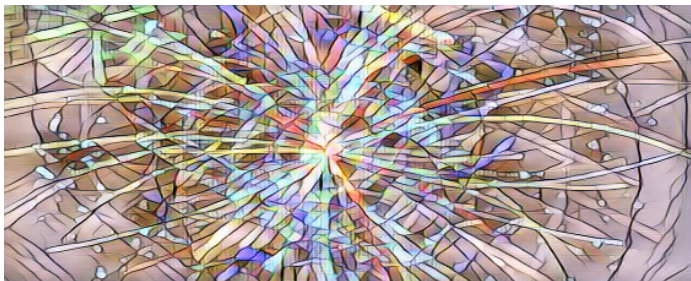
with lots of support from Ann Durie & Mike Seymour



It's a pleasure to host this ML school - great lecturers & a great experience so far!

- **Historical notes** - Carsten Peterson (Computational Biology, Lund)
- **Introduction to machine learning** - Mattias Ohlsson (Computational Biology, Lund)
- **Machine learning in high energy physics** - Ben Nachman (LBNL, Berkeley)
- **Machine learning for image analysis** - Niclas Danielsson (Axis, Lund)
- **How to GAN LHC events** - Anja Butter (Heidelberg),
- **Accelerating HEP theory with ML models** - Stefano Carrazza (Milan)
- **How to implement denoising and variational autoencoders** - Najmeh Abiri (IT-University Copenhagen Computer Science)
- **Bayesian deep probabilistic differentiable programming: A scientific approach to AI** - Michael Green (Desupervised, Copenhagen)
- **Can we "machine-learn" the next standard model?** - Wolfgang Waltenberger (Vienna)
- **Towards the autonomous machine learning fueled supply chain** - Malte Tichy (Blue Yonder, Hamburg)
- **Outlook on ML in HEP** - Tilman Plehn (Heidelberg)

Let's make this week interactive, educational & fun!



During the week, you'll have

- ◇ Introductory, in-depth and specialized lectures and presentations  
...with lots of chances for questions & answers! Just ask!
- ◇ Hands-on tutorials  
...in smaller breakout groups.

**Goal: We want this to be as interactive as possible!**

## Important information

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In case of emergencies, contact the local organizers: Malin Sjö Dahl (malin.sjodahl@thep.lu.se) and Stefan Prestel (stefan.prestel@thep.lu.se)

You can find information and the timetable in indico:  
<https://indico.cern.ch/event/910548>.

All lectures, talks and tutorials will be held on zoom:  
<https://lu-se.zoom.us/j/61820390860> (meeting password: 0118)

We'll be using zoom breakout rooms for the tutorials. **Thus, please use the mail with which you registered in zoom as well...and use your full name as screen name.**

## Neural networks and particle physics

There's a long history of machine learning in Lund!

...unfortunately, today's lectures won't be available on VHS :(

...but let's get started anyway!



View: [Part 1](#) [Part 2](#) [Part 3](#) [Part 4](#)

If you experience any problem watching the video, click the download button below

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Peterson, Carsten

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