

## Welcome to the machine

*Prof. Tobias Golling*  
*Universität Genf, Schweiz*

We live in a unique era blessed with one of the most amazing machines ever conceived by mankind, the Large Hadron Collider (LHC), which is giving us the potential to unlock some of the mysteries of the Universe. At the same time another "machine" is emerging thanks to advances in neural networks modelled loosely on the human brain giving rise to machine learning and artificial intelligence. We're approaching a crossroad where machine learning has a transformative effect on the way we do science. The talk will illustrate this fascinating journey by using the challenges posed by the LHC as examples.