



universität  
wien

Fakultät für Physik



ESI

Erwin Schrödinger International Institute  
for Mathematics and Physics

# Machine Learning in Physics Vienna Doctoral School in Physics- ESI Winter School 2020

10 - 20 February 2020

Faculty of Physics, University of Vienna

Machine learning is increasingly used in many branches of physics and is changing the way we do research. In lectures complemented by hands-on exercises, students will gain an understanding of various machine learning methods and learn about their application in materials science, particle physics and quantum science.

#### Introduction to Machine Learning:

Philipp Grohs (University of Vienna, AT)  
Marylou Gabrié (NYU, US)

#### Machine Learning in Materials Science:

Jörg Behler (University of Göttingen, DE)  
Michele Ceriotti (EPFL, CH)

#### Machine Learning in Quantum Science:

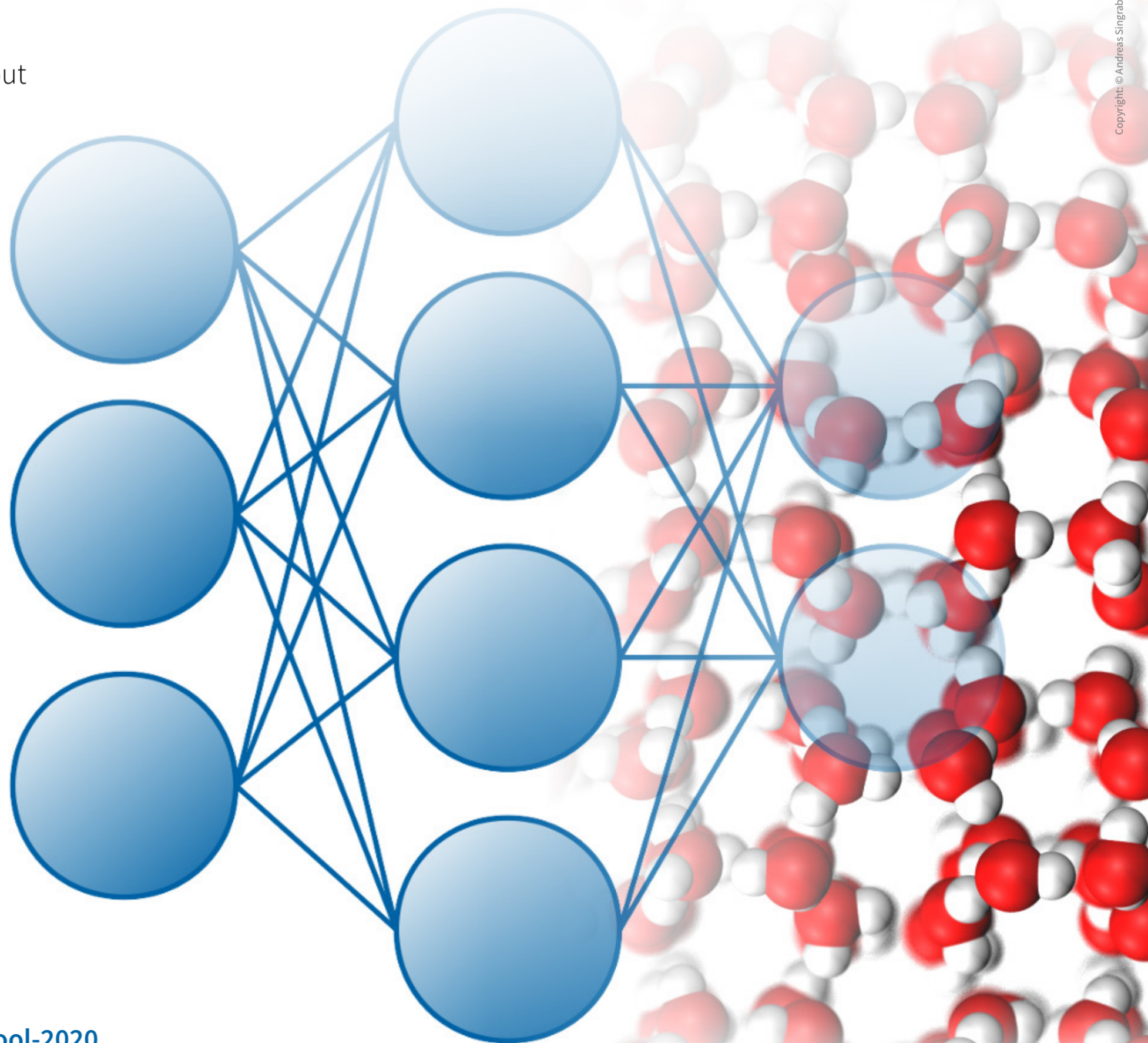
Florian Marquardt (MPI Erlangen, DE)  
Hans Briegel (University of Innsbruck, AT)

#### Machine Learning in Particle Physics:

Wolfgang Waltenberger (HEPHY, AT)  
Gregor Kasieczka (University of Hamburg, DE)

#### Case Studies

Application deadline: 24 Nov 2019



[vds-physics.univie.ac.at/winter-school-2020](https://vds-physics.univie.ac.at/winter-school-2020)