



SwissMAP

The Mathematics of Physics
National Centre of Competence in Research

Master Class in Mathematical Physics

Geneva
2019-2020

List of courses:

Fall:

Introduction to Statistical Mechanics I - Yvan Velenik
Quantum Mechanics for mathematicians - Anton Alekseev
Quantum information theory - Nicolas Brunner
TBA - Stanislav Smirnov
Random Matrices and Universality I - Antti Knowles

Spring:

Introduction to Statistical Mechanics II: The example of the Ising model - Hugo Duminil-Copin
An introduction to Topological Field Theory - Marcos Marino
Knots and Quantum Groups: Theory and Computations without Representations - Dror Bar Natan
Random Matrices and Universality II - Johannes Alt

Mini-courses:

Fall: Maxim Zabzine, Tobias Eckholm * (Uppsala)

Spring: Anna Beliakova, Vincent Tassion (Zurich)

* *To be confirmed*

Conditions:

The program is aimed at Master students and beginning PhD students. Participants will enroll in a one-year program at the University of Geneva starting in September 2019.

Fellowships covering accommodation and local expenses are available.

Participants will be offered the possibility of obtaining a Master Degree from the University of Geneva by completing a Master Thesis for 30 additional ECTS credits.

Application deadline: **January 15, 2019**

nccr-swissmap.ch/master-class-2019

Questions about the program:

swissmap-masterclass2019@unige.ch



SWISS NATIONAL SCIENCE FOUNDATION



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DE GENÈVE

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