Introduction

Modern mathematical physics was born from the attempts to gain mathematical understanding of quantum field theory and statistical mechanics. In those fields powerful new methods were developed around the concepts of renormalization and universality. The Helsinki Mathematical Physics Group has been in applying these ideas to a wide variety of problems including turbulence and stochastic differential equations, kinetic theory, fluctuating thermodynamics, Stochastic Löwner Evolution (SLE), scaling limits of two dimensional critical lattice models and Liouville Quantum Gravity.

The group has active collaboration with researchers in the US, France, Germany, Belgium, Switzerland and Italy. It currently belongs to the Academy of Finland Center of Excellence in "Analysis and Dynamics Research" (2008-2019) and is also part of the Atmospheric Mathematics project at the HU.

How to reach us

The Mathematical Physics Group is located at the Department of Mathematics of the University of Helsinki, at the Kumpula campus. The address is Gustaf Hällströmin katu 2, which you can find on this map. From the central railway station you can take for example one of the buses 55, 71, 73B, 75, 77, 730, 731, 734, 741, 742 or tram 6 to the stop at Arabia shopping mall. The department is then on top of the hill on your left.

For students

Information about mathematical physics courses taught in the Kumpula campus can be found here.