

## Workshop

# High-Dimensional Statistics: Theory and Applications

**We invite to the High-Dimensional Statistics: Theory and Applications Workshop. The workshop is organized by the Hausdorff School for Advanced Studies in Mathematics, with the support of the ECONtribute: Markets & Public Policies Cluster of Excellence.**

Many estimation problems in modern statistics are high-dimensional, that is, the number of parameters to be estimated is much higher than the number of available observations. High-dimensional estimation problems have received a lot of attention in recent years and a wide range of statistical tools have been developed to deal with them. Prominent examples are the Lasso, boosting algorithms, neural networks and their recent reincarnation in deep learning.

This Hausdorff School is intended for motivated graduate and postdoctoral students who want to get acquainted with recent advances in the field of high-dimensional statistics. The lectures will give insight into the statistical methodology as well as the mathematical tools needed to analyze the methods.

**Dates:**

July 26 - 30, 2021

**Venue:**

Lipschitz-Saal, Endenicher Allee 60, Bonn

**Format:**

The event is planned as hybrid. Please indicate in the application form whether you prefer online or in-person participation. Due to the current situation we cannot guarantee how many participants will be able to attend in presence.

**Lectures by:**

**Kengo Kato** (Cornell University, US)

**Hannes Leeb** (University of Vienna, Austria)

**Johannes Schmidt-Hieber** (University of Twente, Netherlands)

**Jane-Ling Wang** (University of California, Davis, US)

**Local organizers:**

Sven Otto ([sven.otto@uni-bonn.de](mailto:sven.otto@uni-bonn.de)), Michael Vogt ([michael.vogt@uni-bonn.de](mailto:michael.vogt@uni-bonn.de))

**Call for participation:**

Financial support for PhD students and postdocs is available. Please send applications (including a letter of intent, a CV, and a letter of recommendation) using the online application form at <https://www.hcm.uni-bonn.de/high-dimensional-statistics-2021/>. The deadline for applications is: **April 30, 2021**. *(A few slots for online participation are still available!)*

**Please note:**

Disregarding of applying for financial support every participant has to register beforehand. You will be notified in due time about whether a participation / financial support is possible