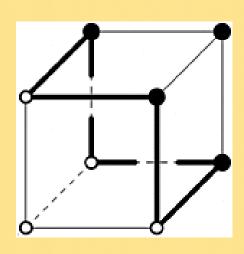




## **DUAL TRIMESTER PROGRAM**

SEPTEMBER - DECEMBER 2024



## Boolean Analysis in Computer Science

## **Organizers:**

Sergey Bobkov, Polona Durcik, Alexandros Eskenazis, Irina Holmes Fay, Paata Ivanisvili, Dor Minzer, and Alexander Volberg

The core topics of the trimester program would be: learning theory, complexity of classical and quantum algorithms, vector valued functions on the hypercube, complex hypercontractivity, polynomial inequalities on the hypercube, and discrete approximation theory on the hamming cube.

## Workshops

**School** "PAC (probably approximately correct) learning and Boolean Harmonic Analysis"

(September 16 - 20, 2024)

Workshop: "Analysis and Geometry on Discrete Spaces"

(October 7 - 11, 2024)

Workshop: "Analysis in TCS: testing, learning, and complexity"

(November 4 - 8, 2024)

Workshop: "Information theory, Boolean functions, and lattice

problems"

(November 18 - 22, 2024)

Further Planned Activities: The trimester will organize work into regular get-togethers: e.g. weekly seminars, informal workshops, and open problem sessions.



Call for participation: The Hausdorff Research Institute offers visiting positions for the whole period of the trimester program (for senior scientists, postdocs and PhD students). The deadline for applications February 29, 2024.

Please send applications (including CV and, for postdocs and PhD students, a letter of recommendation) using our online application form at https://www.him.uni-bonn.de/app-boolean-analysis-trimester-program/. In addition numerous fellowships for shorter periods are