



# Boolean Analysis in Computer Science

## Organizers:

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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 available.