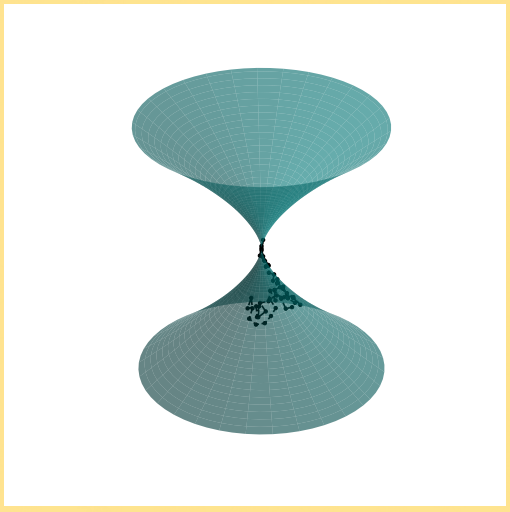
HAUSDORFF RESEARCH INSTITUTE FOR MATHEMATICS

UNIVERSITÄT BONN

DUAL TRIMESTER PROGRAM | September - December, 2026



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Geometric Statistics: theory, application, and computation

Organizers:
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The community around geometric statistics – its theory, application, and computation – is growing both in numbers and in breadth. This ranges from increasing interaction with related research communities such as manifold statistics, topological data analysis, and geometric machine learning to fertilization of the applied sciences such as biostructure and biomedical modeling and imaging.

This dual trimester program will foster and expand interactions among the above disciplines within the mathematical sciences. The focus will be on the following six topics:

1. Geometric structure of data objects and suitable spaces,
2. Stochastic analysis on manifolds and singular spaces,
3. Statistical behavior and geometry,
4. Applied topology,
5. Non-Euclidean learning,
6. Computational methods for all of the topics listed above.

We will have the following activities:

Introductory School "Geometric Statistics"
(September 14 - 18, 2026)

Workshop I "Stochastic Analysis, Statistics, and Computation on Manifolds and Singular Spaces"
(October 12 - 16, 2026)

Workshop II "Geometry, Topology, and Learning on Smooth and Singular Spaces"
(November 9 - 13, 2026)

Conference "Interactions of Statistics and Geometry III [ISAG III]"
(December 7 - 11, 2026)

Call for participation: The Hausdorff Research Institute offers visiting fellowships for research stays during the trimester program (for senior scientists, postdocs and PhD students). The due date for applications is **December 7, 2025 (CET).**
Please send applications (including CV, and for postdocs and PhD students, contact information of at least one potential reference) using our online application form at **https://math-events.uni-bonn.de/e/him2026-tp3**.