



TRIMESTER PROGRAM

MAY – AUGUST 2023



The Arithmetic of the Langlands Program

Organizers:

Frank Calegari, Ana Caraiani, Laurent Fargues, Peter Scholze

The Langlands program aims to relate systems of polynomial equations with integer coefficients to automorphic forms, i.e. functions on symmetric spaces with a large number of discrete symmetries.

The focus of the trimester will be on some manifestations of this program, including:

- moduli spaces of shtukas
- p-adic techniques in local Langlands and the relation to geometric Langlands
- Shimura varieties and more general spaces in global Langlands

We will have the following activities:

Summer School on the Arithmetic of the Langlands Program

(May 8-12, 2023)

Conference on Local Langlands and p-adic methods

(June 12-16, 2023)

Young Researchers Network on the Arithmetic of the Langlands Program (July 17-21, 2023)

Conference on Global Langlands, Shimura varieties, and shtukas (August 7-11, 2023)

Those planning to participate include:

Christophe Breuil Pierre Colmez Gabriel Dospinescu Tony Feng Jessica Fintzen Dennis Gaitsgory Toby Ge Michael Harris Eugen Hellmann Tasho Kaletha Kiran Kedlaya Chandrashekhar Khare Mark Kisin Kai-Wen Lan Arthur-César Le Bras Sophie Morel Wieslawa Niziol Lue Pan Vytautas Paskunas Vincent Pilloni Benjamin Schraen Benoit Stroh Richard Taylor Eva Viehmann Zhiwei Yun Sarah Zerbes Wei Zhang Xinwen Zhu



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 **November 30, 2022**.

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/index.php?id=4834. In addition numerous fellowships for shorter periods are available.