Mathematisches
Forschungsinstitut
Oberwolfach

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Leibniz
Association

Oberwolfach Seminar
Reduction of Arithmetic Varieties

Organizers: Thomas J. Haines, College Park
Timo Richarz, Darmstadt
Eva Viehmann, Münster
Torsten Wedhorn, Darmstadt
Date (ID):   20 – 25 October 2024 (2443b)
Deadline: 15 July 2024

Shimura varieties have first been studied systematically by Deligne in the 70s. They play a central role in the realization of Langlands correspondences. In recent years, Scholze has introduced moduli spaces of shtukas also in the local number theoretic case merging the geometric Langlands program and the classical Langlands program, culminating in the (still conjectural) geometrization of the local Langlands program by Fargues and Scholze. Together the reduction of Shimura varieties and moduli spaces of shtukas have contributed to spectacular developments in number theory and arithmetic geometry in the last decades.

This seminar gives an introduction to the current theory of moduli spaces of shtukas, the construction of local models in case of bad reduction, and their study using stratifications.

Please see the website of the seminar for detailed information:

www.mfo.de/occasion/2443b

The seminar takes place at the Mathematisches Forschungsinstitut Oberwolfach. The Institute covers board and lodging. By the support of the Carl Friedrich von Siemens Foundation travel expenses can be reimbursed up to 150 EUR in average per person (against copies of travel receipts). The number of participants is restricted to 25.

Applications including title, ID and date of the intended seminar, together with **one pdf-file attached** containing

- full name and university/institute address, incl. e-mail address
- short CV and publication list
- present position, university
- name of supervisor of Ph.D. thesis
- a short summary of previous work and interest

should be **sent by e-mail** via **seminars@mfo.de** until 15 July 2024 to:

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