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# Seminar des SFB/TRR 326 GAUS

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**Freitag, 08.11.2024**

**Dr. Håvard Damm-Johnsen**

University of Oxford / MPIM Bonn

spricht über das Thema

## **Rigid cocycles and geodesics on Shimura curves**

Darmon and Vonk's theory of rigid meromorphic cocycles gives a conjectural description of abelian extensions of real quadratic fields akin to the classical theory of complex multiplication. While their conjectures currently seem out of reach, the work of Darmon–Pozzi–Vonk uses  $p$ -adic families of Hilbert modular forms to give unconditional results in this direction. I will explain how a reinterpretation in terms of the so-called Kudla programme suggests an approach to extending their results. This point of view also gives a new proof of a theorem of Rickards on intersections of geodesics on Shimura curves, which is related to forthcoming work of Darmon–Vonk.

Ort: **INF 205, SR A**

Beginn: **13:30 Uhr**

Alle Interessenten sind herzlich eingeladen.

Prof. Dr. Judith Ludwig