



## Mathematics and CS Seminar

# The Grunwald Problem for solvable groups

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Host: Tim Browning

Let  $K$  be a number field. The Grunwald problem for a finite group (scheme)  $G/K$  asks what is the closure of the image of  $H^1(K, G) \rightarrow \prod_{v \in M_K} H^1(K_v, G)$ . For a general  $G$ , there is a Brauer-Manin obstruction to the problem, and this is conjectured to be the only one. In 2017, Harpaz and Wittenberg introduced a technique that managed to give a positive answer (BMO is the only one) for supersolvable groups. I will present a new fibration theorem over quasi-trivial tori that, combined with the approach of Harpaz and Wittenberg, gives a positive answer for all solvable groups. Partial results were also obtained independently by Harpaz and Wittenberg.

**Thursday, June 27, 2024 01:00pm - 03:00pm**

Office Bldg West / Ground floor / Heinzl Seminar Room (I21.EG.101)



This invitation is valid as a ticket for the ISTA Shuttle from and to Heiligenstadt Station.

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