

Oberseminar Topologie: 19.10.2022

**Achim Krause (Uni Münster)**

Title: On the K-Theory of  $\mathbb{Z}/p^n$

Abstract: In recent work with B. Antieau and T. Nikolaus, we develop an approach to compute K-theory of  $\mathbb{Z}/p^n$  and related rings, based on prismatic cohomology. On one hand, this leads to an explicit, practical algorithm to compute these groups, greatly extending the known range. On the other hand, we are able to deduce a surprising general pattern: In all large even degrees, the K-theory of  $\mathbb{Z}/p^n$  vanishes. In this talk, I want to explain the main ingredients for this computation.