



universität
wien

Fakultät für Mathematik

Mathematisches Kolloquium

Mittwoch, 13. März 2024

Sky Lounge

EINLADUNG

Sophie Frisch

(TU Graz)

„Stable rank in commutative ring theory“

„Stable rank in commutative ring theory“

Abstract:

The stable rank of a ring, introduced by Bass and Vaserstein, is an important invariant in algebraic K-theory, but, we think, underappreciated in commutative ring theory. The stable rank of a ring R is comparable to its Krull dimension: for Prüfer rings at least, it is always bounded from above by $\dim(R)+1$, but it is not really a measure of dimension, since it equals 1 for every local ring.

We will show that stable rank equals 2 for some 2-dimensional Prüfer rings, namely, rings of integer-valued polynomials over rings of integers in number fields, and discuss possible generalizations.

14.45 Uhr: Kaffeejause

15.15 Uhr: Vortrag

vinum cum pane im Anschluss

Balázs Szendroi
Radu Ioan Bot