



Universität Konstanz

Fachbereich  
**Mathematik und Statistik**  
Schwerpunkt  
Reelle Geometrie und Algebra

## Einladung

Im Oberseminar *Reelle Geometrie und Algebra* hält

**Fabian Reimers**

(Technische Universität München)

am **Freitag, 02.12.2016**, einen Vortrag zum Thema:

*Separating invariants of finite groups*

Der Vortrag findet um **13:30 Uhr** in **F426** statt.

Alle Interessenten sind herzlich eingeladen.

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**Abstract:** Let  $X$  be an affine variety with an action of an algebraic group  $G$  (over an algebraically closed field  $K$ ). A subset (e.g. a subalgebra) of the invariant ring  $K[X]^G$  is called separating if it has the same capability of separating the orbits as the whole invariant ring.

In this talk we focus on finite groups and show how the existence of a separating set of small size, or a separating algebra which is a complete intersection, is related to the property of  $G$  being a reflection (or bireflection) group. Theorems of Serre, Dufresne, Kac-Watanabe and Gordeev about linear representations are extended to this setting of  $G$ -varieties.

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Sebastian Gruler  
Koordinator Oberseminar