

**Speaker :** Arno Fehm

**Title :** *Domains with Hilbertian quotients fields*

**Abstract :** Hilbert's irreducibility theorem for number fields is of central importance in Galois theory and arithmetic geometry and led to the notion of a Hilbertian field, that is, a field that satisfies the consequence of Hilbert's theorem. We investigate sufficient conditions on the arithmetic of an integrally closed domain  $R$  that imply that the quotient field of  $R$  is Hilbertian, thereby extending a result of Weis-sauer on generalized Krull domains of dimension exceeding one. As an application we get that certain fields of power series are Hilbertian and deduce that every finite group can be realized as a Galois group over them. (Joint work with Elad Paran.)