

# Oberseminar zur Algebra

Lehrstühle A und D für Mathematik

## Vortragsankündigung

*Zeit und Ort:* **Mittwoch, 21. April 2010, 10.00 Uhr bis 11.30 Uhr** in SG 12

*Vortragender:* **Colin Reid**

*Titel:* **On the finite images of just infinite profinite groups**

*Inhalt:* A profinite group  $G$  is said to be just infinite if every non-trivial closed normal subgroup of  $G$  is of finite index. Such 'minimally infinite' groups appear naturally in several contexts and specific cases have been intensively studied, but the general theory is more limited. (I will give the definitions and some motivating examples at the start of the talk.) In a recent paper by Barnea, Gavioli, Jaikin-Zapirain, Monti and Scoppola, it was proved that an infinite pro- $p$  group  $G$  is just infinite if and only if, for every open subgroup  $H$  of  $G$ , there are only finitely many open normal subgroups of  $G$  not contained in  $H$ . I will present a generalisation of this result to the class of profinite groups, and discuss some further consequences for the structure of just infinite profinite groups, in particular their finite continuous images.

(<http://arxiv.org/abs/0906.1771>)

Wir laden alle Interessierten herzlich zu diesem Vortrag ein.