

## *Is there a field with one element?*

### Abstract:

In order to be able to transfer methods of algebraic geometry to number theory, it is desirable to be able to consider integer rings as well as their quotients as algebras over a fixed ground field. The characteristic of that ground field must divide all primes, hence be equal to one. As there is no such field, several people have tried to find a substitute for it in order to establish a 'geometry below the integers'.

The talk presents an overview to developments in this direction which have taken place in the last ten years.

**Prof. Dr. Anton Deitmar**