

## Cinzia Casagrande Fano varieties with large Picard number

## TIME:

9 Jul 2007, 16:00 - 18:00

## LOCATION:

FU-Berlin, Institut für Mathematik Arnimallee 3, Rm. 119

Let X be a smooth complex Fano variety of dimension n. Then X is simply connected and after boundedness, we know that X has only a finite number of possible topological types. However little is known on its topological invariants in arbitrary dimension. We consider in particular the second Betti number of X, which coincides with the Picard number r. It is expected that r has linear bound in the dimension n. We will explain how Mori theory can be used to study this kind of questions, and give some results in this direction on Fano varieties having an extremal contraction of fiber type.