Formal and Rigid Geometry

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Calendario: 10 ore, 26 e 28 aprile 2010, 3, 5, 6 maggio dalle 16:30 alle 18:15. Torre Archimede, Aula 2AB40.

Prerequisiti: Familiarità con i primi rudimenti di Geometria Algebrica (ideali primi, spettro di un anello, definizione di fascio.)

Tipologia di esame: A scelta tra una prova orale sui contenuti del corso o un seminario di approfondimento.

SSD: MAT/03

Topics:

This series of lectures is intended to give an introduction to rigid geometry, a theory which may be viewed as an analogue of the theory of complex analytic functions over local fields or, more generally, over fields with a complete non-Archimedean valuation. Starting with classical rigid geometry à la Tate, we will also discuss the approach of Raynaud via formal schemes. For illustration we look at some applications, such as the rigid uniformization of abelian varieties and related questions on Néron models.

1. Elementary non-Archimedean calculus and affinoid spaces

2. Rigid spaces à la Tate

3. Rigid spaces in terms of formal models

4. Rigid uniformization of abelian varieties

References:
In an expanded form "Lectures on Formal and Rigid Geometry" are available at
`http://wwwmath.uni-muenster.de/sfb/about/publ/heft378.pdf`

Lingua: Inglese