

Universidad Complutense de Madrid

Facultad de Ciencias Matemáticas

Departamento de Álgebra

Teléfono: 91 394 45 70, Fax: 91 394 46 62

Correo electrónico: Algebra@mat.ucm.es

SEMINARIO DE GEOMETRÍA ALGEBRAICA

Miércoles 13 de septiembre de 2006, 12:00, Seminario 238

Thierry Coquand

(Universidad de Göteborg)

Impartirá la conferencia:

A logical approach to abstract algebra

Summary. We survey recent works in constructive mathematics, mainly in algebra. These works show that Hilbert's program works for a large part of abstract algebra. Using in an essential way the ideas contained in the classical arguments, we can transform most of highly abstract proofs of "concrete" statements into elementary proofs, that can be seen directly as idealised algorithms. Surprisingly the arguments we get are not only elementary but also mathematically clearer and not necessarily longer. In some cases the simplification is significant enough to suggest improved versions of classical theorems. One (still distant?) goal is to connect research in constructive mathematics with computer algebra.