

Real Algebraic Geometry Seminar



UNIVERSITY OF
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Department of Mathematics

Speaker: **Julia Knight**
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Tuesday, April 15, 2014
2:00 pm
Room: 125 Hayes-Healy Hall

Title: Roots of polynomials in Hahn fields

Abstract:

I will continue with fields $K((G))$ of generalized power series, giving the ideas behind the following result.

Theorem (Newton-Puiseux). Let G be a divisible ordered Abelian group.

- If K is an algebraically closed field, then so is $K((G))$.
- If K is a real closed ordered field, then so is $K((G))$.