Department of Applied and Computational Mathematics and Statistics Colloquium



Frank-Olaf Schreyer

Department of Mathematics & Computer
Science
Saarland University

Refined algorithm to compute syzygies

In the talk I will explain how a refined algorithm to compute syzygies leads to a substantial speedup in syzygy computation of free resolutions. The algorithm starts with a Groebner basis over the rational, but then may compute the free resolution with floating point coefficients. I will indicate why I believe that this algorithm is numerically stable.

