MATHEMATICS COLLOQUIUM

Ranks of matrix factorizations

A free resolution of a module over a ring is an approximation of the module in terms of simple building blocks, namely free modules. Several of the most important open problems in commutative algebra concern bounds on the ranks of the free modules appearing in free resolutions. I will discuss one such conjecture involving hypersurface rings, and a novel interpretation of this conjecture in terms of algebraic geometry. This is joint work with Mark Walker.

THURSDAY

MARCH

20

4:30 - 5:30PM
LECONTE COLLEGE
ROOM 444

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