

MSRI/Evans Lecture Monday, February 11 2013 60 Evans Hall, 4:10 PM

Multiplicities of graded families of ideals

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The multiplicity of a local ring R is its most fundamental invariant. For example, it tells us how singular the ring is.

The multiplicity is computed from the limit as n goes to infinity of the length of R modulo the nth power of its maximal ideal. Many other multiplicity like invariants naturally occur in commutative algebra. We discuss a number of naturally occurring limits of this type, and show that in very general rings, such limits always exist.

Graduate Students and Postdoctoral Fellows are particularly welcome

There will be refreshments following each lecture at La Val's Pizza, 1834 Euclid sponsored by the Mathematical Sciences Research Institute