

ALGEBRAIC GEOMETRY AND NUMBER THEORY SEMINAR

4:00 PM, Wednesday, September 10, 2014, Martin M-102
Refreshments 3:30 PM, Martin O-section foyer

Orlov spectra for triangulated categories

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The idea of giving a set of generators is ubiquitous in mathematics. Take groups for example. From a given presentation, one can understand the complexity of a group by asking what is the maximal length word necessary to write any element of G . For a triangulated category, the main operation to build a new object is taking the cone over a morphism between old ones. Starting from a given object, the maximal number of cones necessary to rebuild the whole category is the generation time of that object. The Orlov spectra is the set of all possible generation times. It is an interesting and difficult invariant with use in algebraic geometry, representation theory, commutative algebra, and beyond.

In this talk, I will not assume any familiarity with triangulated categories but some acquaintance with Ext groups of modules over a ring and global dimensions of rings would be helpful.

All welcome. Research students in particular are encouraged to attend.

For further information, contact Jim Brown, jimlb@clemson.edu, Long 111.

Online: <http://www.math.clemson.edu/~jimlb/NumberTheoryGroup/NTSeminar.html/>