

The Institute of the Mathematical Sciences of the Americas

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An Introductory Mini Course into Quantum Toric Geometry: Lecture II

Ernesto Lupercio

We will introduce the foundations of Quantum Toric Geometry as developed by Katzarkov, Lupercio, Meersseman and Verjovsky, Quantum toric geometry is a generalization of toric geometry where irrational fans correspond to non-commutative spaces called quantum toric varieties. As non-commutative spaces, Quantum toric varieties are to usual toric varieties what the Quantum torus is to the usual torus.

Lecture II

1. LVM theory
2. Quantum GIT
3. Moduli spaces of toric varieties.

References: It is useful to be familiar with toric varieties (for example the book of Fulton).