Department of Mathematics, BGU

Jerusalem - Be'er Sheva Algebraic Geometry Seminar

On Wednesday, October ,28 2020

At 15:00 - 16:30

In

Martin Olsson (UC Berkeley (

will talk about

Derived categories and birationality

Abstract: I will discuss expectations and results around the following question: If \$X\$ and \$Y\$ are two smooth projective varieties with equivalent derived categories, when can one conclude that \$X\$ and \$Y\$ are birational? The study of Fourier-Mukai equivalences yields many examples of non-birational varieties with equivalent derived categories. On the other hand, it appears that by considering slightly more structure than just the derived categories one can conclude birationality in many cases. This is joint work with Max Lieblich.

 $Recording\ available\ here:\ https://us02web.zoom.us/rec/share/U7Zp8zsHQrL4WGyhHAx9sSLRNwE86WdDsEx0qM$