

**FROBENIUS–SESHADRI CONSTANTS
AND CHARACTERIZATIONS OF
PROJECTIVE SPACE**

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Mori and Mukai conjectured that projective spaces can be characterized by their intersection theory. While their conjecture has been proved over the complex numbers by Cho, Miyaoka, and Shepherd–Barron, the conjecture is still open in positive characteristic. We will describe how Seshadri constants and a positive-characteristic analogue of these constants, called Frobenius–Seshadri constants, can be used to give a partial answer to Mori and Mukai’s conjecture in positive characteristic. Frobenius–Seshadri constants were introduced by Mustata–Schwede and the presenter, and are obtained in a way similar to how Hilbert–Kunz multiplicity is obtained from Hilbert–Samuel multiplicity.

Talk will take place in Pearce 226 on

FRIDAY, 11/16/2018, 11:15AM–12:15PM

Hope to see you there!