

FELIX KLEIN SEMINAR

Speaker: Martin Kerin
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Date: Thursday, May 2, 2019

Time: 2:00 PM

Location: 258 Hurley Hall

Lecture Title:

Double disk bundle decompositions and rational ellipticity

Abstract

As many of the known examples of manifolds with non-negative sectional curvature admit a double disk bundle decomposition, K. Grove asked whether all non-negatively curved manifolds admit such a decomposition. Surprisingly, this is unknown even for Lie groups. On the other hand, the Bott Conjecture asserts that all non-negatively curved manifolds are rationally elliptic. With these two open problems as motivation, F. Galaz-García, J. DeVito and I have recently begun an investigation into which manifolds admitting a double disk bundle decomposition are rationally elliptic. This talk will report on our current observations and results.