Department of Mathematics University of Notre Dame

FELIX KLEIN SEMINAR

Speaker: Peter Petersen

University of California, Los Angeles

Date: Thursday, September 21, 2023

Time: 2:00 PM

Location: 258 Hurley Hall

Zoom URL: NA



Lecture Title:

Curvature of the Second Kind and the Weitzenböck Formula

Abstract

The curvature of the second kind is a version of the curvature tensor that acts on trace free symmetric tensors. It is important for stability of Einstein metrics. The talk covers various recent results about what can be expected when the operator is nonnegative or nonpositive. This has been studied by Ogiue-Tachibana, Nishikawa, and more recently Cao-Gursky-Tran and X. Li. We will mention some of those results and also explain a new approach that uses Weitzenböck formulas on forms.