
BERN-FRIBOURG GRADUATE SEMINAR

a seminar for Master and PhD students

Thursday 14th November, 2024: 17:15 - 18:00

Room B5, Exakte Wissenschaften, Bern

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Introduction to calibrations

Abstract

A closed n -form is a calibration if it evaluates to at most one at each (oriented) n -plane. These were introduced by Harvey and Lawson (1982). The motivation being that if each (oriented) tangent space of a submanifold evaluates to the maximal value one, then the submanifold is homologically area-minimizing; such a submanifold is said to be calibrated by the form. We describe known classification results of (constant-coefficient) calibrations in dimensions up to seven and the subclassification of calibrations whose conformally flat calibrated submanifolds are flat.