
AMIR BABAK AAZAMI, Clark University

Normal forms, “almost-Einstein” metrics, and conformal invariants

A semi-Riemannian manifold has a “normal form” if its curvature tensor is determined by just the critical points and values of its sectional curvature. Examples include Riemannian Einstein 4-manifolds and the classification of Lorentzian spacetimes by their Petrov Types. In this talk we will combine these two cases, yielding new examples of distinguished “almost-Einstein” metrics. We will also briefly discuss higher-dimensional analogues of these results, focusing on conformal invariants.