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„Geometric models for the analytic structure group and higher eta invariants.“

Abstract:

More than a decade ago, Higson and Roe introduced an analytic analogue of the structure set in topology. This analytic structure group has in recent years attracted quite the attention as a natural range for invariants coming both from surgery and Stolz' positive scalar curvature sequence. In this talk I will describe a geometric model à la Baum-Douglas for Higson-Roe's analytic structure group. The geometric model provides a natural domain for a number of secondary invariants defined from (higher) eta invariants, all of which factors through a Chern character defined on the geometric model. Joint work with Robin Deeley.