Ambient metric expansion and a generalization of the σ_k-Yamabe problem

Robin GRAHAM

University of Washington

Alice Chang and Hao Fang have recently proposed a generalization of the σ_k-Yamabe problem, which they have shown is variational for all conformal classes, not just those which are locally conformally flat. In this talk, properties of this generalized problem will be discussed. These properties are consequences of new information concerning the ambient metric expansion.