

Towards constructing constant scalar curvature Kähler metrics on elliptic surfaces

Gluing techniques have been establishing themselves as a standard, albeit difficult, approach for obtaining geometrical objects with special properties. In this talk, I will focus on this technique in the context of Kähler metrics with constant scalar curvature on elliptic surfaces. The first requirements for this program are to have enough models for such metrics and to figure out the obstructions for gluing them together into metrics with desired properties. This is joint work with Michale Singer and Joel Fine.