

# The Szegö kernel of a unit circle bundle

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## **Abstract**

In this talk, we are going to introduce a set of new elliptic equations related to the asymptotic expansion of the Bergman potential. Such a set of new equations are related to the classical Ramadanov Conjecture. We study the unit circle bundle of the universal bundle of the complex projective spaces and we prove a local rigidity theorem of those circle bundles with vanishing log terms.

This is a joint work with G. Tian.