1117-20-357 **Jiuzu Hong*** (jiuzu@email.unc.edu), Chapel Hill, NC 27514. *Parametrization of bases and saturation problems.*

Geometric Satake correspondence provides a uniform way to construct all irreducible representations of reductive groups. It also gives rise to bases of representations and the spaces of their tensor invariants. By recent work of Goncharov-Shen, these bases can be parametrized via tropical geometry. Saturation problems concern multiplicities that appear in the decompositions of representations into irreducible components. I will explain how using Knutson-Tao's saturation theorem, the geometric Satake correspondence and parametrization of bases can be applied to get new results about the saturation problem for the spin group $Spin(2n+1)$. This talk is based on the joint work with Linhui Shen. (Received January 17, 2016)