

1150-17-249

Anthony Giaquinto and **Peter Tingley*** (ptingley@luc.edu), Dept. of math and stats., 1032 W. Sheridan Rd, Chicago, IL 60660. *Peter-Weyl bases, preferred deformations, and Schur-Weyl duality.*

We discuss the deformed function algebra of a reductive Lie group G over the complex numbers using a basis consisting of matrix elements of finite dimensional representations. This leads to a preferred deformation, meaning one where the structure constants of comultiplication are unchanged. The structure constants of multiplication are controlled by quantum 3j symbols. We then discuss connections earlier work on preferred deformations that involved Schur-Weyl duality. (Received July 10, 2019)