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**Anthony Giaquinto\*** (agiaqui@luc.edu), **Alexander Gilman** (gilma080@umn.edu) and **Peter Tingley**. *Peter-Weyl Bases, Preferred Presentations, and Quantum Groups*.

We discuss the deformed function bialgebra  $\mathcal{O}_\hbar(G)$  of a simply connected reductive Lie group  $G$  over  $\mathbb{C}$  using a basis consisting of matrix elements of finite dimensional representations. This leads to a preferred presentation of the deformation in that basis, meaning one where the structure constants of comultiplication are unchanged on all elements. The structure constants of multiplication are controlled by quantum 3j-Symbols. Connections will be made to earlier work of Giaquinto, Gerstenhaber and Schack on preferred presentations that involved Schur-Weyl duality. (Received July 20, 2017)