

1167-22-296

Pablo Boixeda Alvarez* (pboixeda@ias.edu). *ON THE CENTER OF THE SMALL QUANTUM GROUP*. Preliminary report.

The question of the center of the quantum group at a generic parameter was understood by Drinfeld in 1989, but the center of this algebra when you specialize at a root of unity remained an open question. By work of Lachowska, Qi and Bezrukavnikov we had some description of the center of the small quantum group. In joint work with Bezrukavnikov, Shen and Vasserot, we prove a more concrete description of the center of the small quantum group, in terms of the cohomology of a certain affine Springer ber. In joint work with Kivinen and Losev, we link certain questions of the center in Type A with the Hilbert scheme of points on \mathbb{C}^2 . (Received March 09, 2021)