1137-16-71   **Richard G Chandler*** (`richard.chandler@untdallas.edu`), 7400 University Hills Blvd, Dallas, TX 75241, and **Michaela Vancliff**. *The Quantum Spaces of Certain Graded Algebras Related to* $\mathfrak{sl}(2,\Bbbk)$.

Inspired by the work of Le Bruyn and Smith, and the work of Shelton and Vancliff, we analyze certain graded algebras related to the Lie algebra $\mathfrak{sl}(2,\Bbbk)$ using geometric techniques in the spirit of Artin, Tate and Van den Bergh. In particular, we discuss the point schemes and line schemes of certain quadratic quantum $\mathbb{P}^3$s associated to the Lie superalgebra $\mathfrak{sl}(1|1)$, to a quantized enveloping algebra, $\mathcal{U}_q$, of $\mathfrak{sl}(2,\Bbbk)$, and to a color Lie algebra $\mathfrak{sl}_k(2,\Bbbk)$, respectively. The geometry we consider identifies the existence of a central element in the universal enveloping algebra of $\mathfrak{sl}(1|1)$ and in $\mathcal{U}_q$. (Received January 24, 2018)