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William Chin* (wchin@condor.depaul.edu), Dept. of Mathematical Sciences, DePaul University, Chicago, IL 60614. *Representations of quantum $SL(2)$ at roots of unity.*

We develop the theory of special biserial and string coalgebras and other concepts adapted from the representation theory of quivers. These tools are then used to describe the finite dimensional comodules, almost split sequences and Auslander-Reiten quiver for the coordinate Hopf algebra of quantum $SL(2)$ at a root of unity. We also describe the stable Green ring as a polynomial ring $Z[x, y, w^{\pm 1}]$ three indeterminates modulo a rescaled Chebyshev polynomial of the second kind in x . (Received July 16, 2007)