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Noah J Snyder* (nsnyder@gmail.com). *How to recognize $U_q(\mathfrak{g}_2)$ or S_t .*

Suppose someone hands you a modular category, how do you identify whether it's an example you already knew about? One technique is to find a "small" simple object X such that $X \otimes X$ does not have too many summands. Then, following Kazhdan, Tuba, and Wenzl, you can use techniques inspired by knot theory to prove that your category must come from one of the classical quantum groups. In this talk I'll prove a similar result about G_2 extending techniques of Kuperberg. Along the way we will also see Deligne's category S_t appear. (Received February 15, 2010)