1139-18-321 **Brian D. Boe**, **Jonathan R. Kujawa** and **Daniel K. Nakano*** (`nakano@uga.edu`). *Support varieties and tensor ideals for quantum groups.*

Let $\mathfrak{g}$ be a complex simple Lie algebra and let $U_\zeta(\mathfrak{g})$ be the corresponding Lusztig $\mathbb{Z}[q, q^{-1}]$-form of the quantized enveloping algebra specialized to an ℓth root of unity. Moreover, let $\mathrm{mod}(U_\zeta(\mathfrak{g}))$ be the braided monoidal category of finite-dimensional modules for $U_\zeta(\mathfrak{g})$. In this talk I will discuss various questions involving support varieties for quantum groups, In this process I will show how to classify the thick tensor ideals of $\mathrm{mod}(U_\zeta(\mathfrak{g}))$ to resolve some of these questions. With these results one can then compute the prime spectrum of the stable module category associated to $\mathrm{mod}(U_\zeta(\mathfrak{g}))$ as defined by Balmer. (Received February 15, 2018)

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