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J. Matthew Douglass* (mdouglas@nsf.gov). *Equivariant coherent sheaves on a point and Kazhdan-Lusztig bases*. Preliminary report.

Suppose G is a connected, reductive, complex, algebraic group with Lie algebra \mathfrak{g} . In this talk I will discuss (1) a refined version of a question of Ostrik that describes the $G \times \mathbb{C}^*$ -equivariant coherent sheaves on the nilpotent cone of \mathfrak{g} that are supported at $\{0\}$ in terms of the Kazhdan-Lusztig basis of the extended, affine Hecke algebra, and (2) how this description is connected with the computation of the $G \times \mathbb{C}^*$ -equivariant K -theory of some generalized Steinberg varieties. (Received January 11, 2021)