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William Hardesty* (whardesty@lsu.edu), **Pramod N. Achar** (pramod@math.lsu.edu) and **Simon Riche** (simon.riche@uca.fr). *On the modular Lusztig–Vogan bijection.*

It is known that for a reductive algebraic group G defined over an algebraically closed field, there exists a bijection between the set of irreducible equivariant vector bundles on nilpotent orbits which has a number of desirable properties. In the case where the field has characteristic 0, the bijection is often called the “Lusztig—Vogan bijection”. The positive characteristic case, will be referred to as the “modular Lusztig—Vogan bijection”. An argument, originally due to Bezrukavnikov, showed that these bijections arise by comparing two t-structures on the bounded derived category of equivariant coherent sheaves on the nilpotent cone. In this talk we will explain how the “classical” and “modular” bijections can be related through a certain base change technique. As a consequence, the Lusztig—Vogan bijection is “independent” of the characteristic of the field. This talk includes joint work with Pramod Achar and Simon Riche. (Received January 27, 2019)