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Newton-Okounkov cones of free group character varieties.

A Newton-Okounkov cone is a convex set which behaves as a combinatorial snapshot of the coordinate algebra of a variety. I will describe how these objects have been used to answer questions about the coordinate algebras of free group character varieties, and give an update on an ongoing experimental project to use Newton-Okounkov cones to find polynomial presentations of these algebras. (Received September 12, 2016)