December 7: George Lusztig (MIT), "On the classification of irreducible representations of finite reductive groups."

Let G be a connected reductive group defined over a finite field $\mathbb{F}_q$. The classification of irreducible complex representations of $G(\mathbb{F}_q)$ has been known since the 1980s. In this talk I will present an alternative approach to this classification based on the notion of (twisted) categorical centre. This has been known earlier for unipotent representations. The analogous approach to the classification of character sheaves (with the ground field replaced by $\mathbb{C}$) was given earlier by Bezrukavnikov, Finkelberg, and Ostrik.