Lecture 1: Algebraic representations
This will be an introduction to the theory of algebraic representations. I will discuss the representation theory of $SL_2$, and general reductive algebraic groups, recalling the fundamental Steinberg tensor product and restriction theorems. I will then turn to Lusztig's character formula and its status.

Lecture 2: Constructible sheaves
I will discuss the geometric Satake equivalence and Finkelberg-Mirkovic conjecture. This provides a conceptually satisfying setting in which to understand Lusztig's conjecture. Understand Lusztig's conjecture for a fixed prime leads to subtle questions concerning torsion in intersection cohomology. I will discuss what is known and what remains to be understood.

Lecture 3: Higher representation theory
I will discuss the Hecke category in its constructible and diagrammatic incarnations, and state recent theorems and conjectures which suggest that the Hecke category completely controls algebraic representations (as a "module category" in the sense of higher representation theory). Finally, I will try to motivate a recent conjecture with Lusztig.