March 2: Xuhua He (MIT), "Unipotent variety in the group compactification."

Let G be a connected, simple algebraic group over an algebraically closed field. There is a partition of the wonderful compactification $\overline{G}$ of G into finitely many G-stable pieces, which was introduced by Lusztig. In this talk, I will talk about the closure of unipotent variety in $\overline{G}$. It turns out the boundary of the closure is a union of some G-stable pieces and the irreducible components are related to certain Coxeter elements. I will try to explain how the Coxeter elements come into the picture. Based on the description of the closure, some interesting questions about "parabolic character sheaves" will be formulated.