Abstract

We give a general overview of representations of a reductive $p$-adic group $G$. We start by introducing Bernstein components (which are certain subcategories of the category of smooth complex representations of $G$), and the Hecke algebras attached to these Bernstein components. Afterwards, we will introduce unipotent representations of $G$ and we take a closer look at the Hecke algebras attached to the Bernstein components that contain these unipotent representations.