**Speaker:** Jessica Fintzen

**Title:** Representations of $p$-adic groups

**Abstract:** The Langlands program is a far-reaching collection of conjectures that relate different areas of mathematics including number theory and representation theory. A fundamental problem on the representation theory side of the Langlands program is the construction of all (irreducible, smooth, complex) representations of $p$-adic groups. I will provide an overview of our understanding of the representations of $p$-adic groups, with an emphasis on recent progress. I will also briefly discuss applications to other areas, e.g. to automorphic forms and the global Langlands program.