1125-55-3042   **Peter J. Bonventre*** (`pjb9ub@virginia.edu`) and **Luis Pereira**. *Equivariant dendroidal sets and the homotopy theory of equivariant operads.*

In this talk, we will explore new frameworks for studying equivariant operads. The main tool is our category of genuine equivariant trees, which synthesizes the dendroidal category of trees Ω with the orbit category of a finite group O_G. Using this, we define equivariant dendroidal sets, as well as a combinatorial candidate for G-∞-operads via a horn lifting condition. Moreover, we begin the process of showing that these concepts model the same homotopy theory as colored simplicial G-operads by building model structures and Quillen functors comparing them. (Received September 20, 2016)