1135-18-2839   **Paul Bruillard**, **Cesar Galindo**, **Siu-Hung Ng**, **Julia Plavnik*** (`julia@math.tamu.edu`),
Eric Rowell and **Zhenghan Wang**. *On the classification of super-modular categories by rank.*

Super-modular categories are unitary premodular categories that are almost modular. These categories are important for both mathematical and physical reasons. For example, they are used to model fermionic topological phases of matter. Alos, the general structure of premodular categories is reduced to that of modular or super-modular categories, which is another motivation to study super-modular categories.

In this talk, we will start by introducing the basic definitions, examples, and properties of super-modular categories. We will mention the similarities and differences between the theory of super-modular and modular categories. We will also present the classification of super-modular categories up to rank 6, and if time allows, we will mention some of the techniques used to pursuit this classification. (Received September 26, 2017)