1135-18-799 **Julia Plavnik*** (julia@math.tamu.edu), Department of Mathematics, Mailstop 3368, Texas A&M University, College Station, TX 77840. *On classification of modular categories by dimension.*

The problem of classifying modular categories is motivated by applications to topological quantum computation as algebraic models for topological phases of matter. These categories have also applications in different areas of mathematics like topological quantum field theory, representation theory, among others.

A complete classification of modular categories seems to be out of reach at the moment. Therefore a lot of efforts are done in advance in the classification of these categories under certain restrictions. Different directions have been considered: classification by rank, and by dimension, by dimension of the simple objects, among others.

In this talk, we will focus on the classification of modular categories by dimension. We will start by introducing some of the basic definitions and properties of these categories. We will also present different examples to understand better the structure and the notion of dimension in this setting.

The idea of the talk is to give a panorama of the current situation of the classification program for modular categories based on their dimension. (Received September 14, 2017)