Emily Peters* (eep@math.mit.edu). Tensor categories and the classification of subfactors.

The classification of subfactors up to index 5 has recently been completed, and progress at indices (slightly) higher than 5 is being made. In this talk, I will explain how to get tensor categories from subfactors, and how these classification results may be interpreted for fusion categories. The index of a subfactor corresponds to an unusual notion of size for a tensor category; studying small-index subfactors means studying tensor categories which have (at least) one non-trivial object of small dimension. I will be describing joint work with Morrison, Penneys and Snyder. (Received September 22, 2011)