

1131-18-385 **Paul P Gustafson*** (pgustafs@math.tamu.edu). *On the Property F Conjecture*. Preliminary report.

A braided fusion category has Property F if all associated braid group representations have finite image. Rowell's Property F conjecture states that Property F is equivalent to weak integrality, i.e. that the Frobenius-Perron dimension of the category is an integer. In this talk, I will outline recent progress on the Property F conjecture, including progress on a version of the conjecture for arbitrary mapping class groups. In particular, I will show that any twisted Dijkgraaf-Witten representation of a mapping class group of an orientable, compact surface with boundary has finite image. I will also discuss efforts to prove Property F for metaplectic modular categories. (Received July 18, 2017)