

1106-18-2111 **Ryan Johnson, Siu Hung Ng, David Penneys, Jolie Roat*** (jdroat@iastate.edu),
Matthew Titsworth and **Henry Tucker**. *On the classification of rank 4 fusion
categories*. Preliminary report.

The classification of rank 2 fusion categories was completed by Victor Ostrik in 2003. Recently, some advancement of the subject area led to the classification of rank 3 fusion categories with pivotal structure, again by Ostrik, in 2013. In 2014, Hannah Larson continued with the classification of pseudo-unitary fusion categories containing non-self-dual simple objects using newly developed number theory results. In this talk we will report some progress on the classification of rank 4 pseudo-unitary fusion categories with only self-dual simple objects. (Received September 15, 2014)