1121-16-270 **Costel G Bontea*** (costel.bontea@gmail.com) and **Dmitri Nikshych**. *On the Brauer-Picard group of a finite symmetric tensor category.*

The Brauer-Picard group of a finite tensor category $\mathcal{C}$ is the group of equivalence classes of invertible exact $\mathcal{C}$-bimodule categories. It plays a crucial role in the construction and classification of group-graded extensions of $\mathcal{C}$ and also relates to structures appearing in mathematical physics.

If H is a finite dimensional Hopf algebra then the finite dimensional representations of H form a finite tensor category. The task of computing the Brauer-Picard group of such categories is a difficult one and, with few exceptions, no general results are known.

In this talk I will present the techniques used in computing the Brauer-Picard group of a family of finite tensor categories associated to a class of Hopf algebras called Nichols Hopf algebras. This is joint work with Dmitri Nikshych. (Received July 19, 2016)