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Pinhas Grossman, Masaki Izumi and Noah Snyder*, nsnyder@math.indiana.edu. *The Brauer-Picard groupoid of the Asaeda-Haagerup subfactor*. Preliminary report.

The classification of small index subfactors yielded several new subfactors, which are now beginning to be understood. The Asaeda-Haagerup small index subfactor gives a Morita equivalence between two fusion categories. We determine all fusion categories in this Morita equivalence class (there are exactly 6) and all Morita equivalences between them. In particular, we give a new “symmetric” construction of the Asaeda-Haagerup subfactor. This construction allows for new computations (for example, of the Drinfel’d center of the Asaeda-Haagerup fusion categories) and suggests that Asaeda-Haagerup might live in an infinite family. Furthermore, we identify the Brauer-Picard 3-groupoid of Asaeda-Haagerup and construct a new extension of the Asaeda-Haagerup fusion categories by the Klein 4-group. (Received September 07, 2013)