## 1113-46-94 **Noah Snyder\*** (nsnyder@gmail.com). The maximal atlas, Brauer-Picard groupoids, and subfactors.

The maximal atlas describes all ways that you can build a larger factor over N out of a fixed collection of N-N bimodules. The Brauer-Picard groupoid is a certain categorical quotient of the maximal atlas with extra algebraic structure. I will explain both of these ideas, and go through several illustrating examples. I'll end by briefly discussing a new application of these techniques, in joint work with Grossman-Izumi, to give a new more symmetric construction of the Asaeda-Haagerup subfactor. (Received August 13, 2015)