

1163-18-1371 **Peter Schauenburg*** (`peter.schauenburg@u-bourgogne.fr`). *Morita invariants of pointed fusion categories*. Preliminary report.

In principle, the problem as to when two pointed fusion categories are categorically Morita equivalent is completely solved. Results of Gelaki and Naidu tell us exactly how to compute all the pointed fusion categories (i.e. underlying group plus cohomology class) Morita equivalent to a given one (by looking at all the abelian normal subgroups giving rise to a Morita equivalent group-theoretical fusion category that is pointed, and computing its group and cohomology class through explicit formulas). In practice, this may fast turn out to be a difficult or heavy task. In particular, calculations on the level of explicit cocycles (maps depending on several variables in the group) are needed, rather than arguments on the abstract level of cohomology groups. We discuss some rather simple to use tools that allow in some cases to distinguish (most of the time pointed) fusion categories up to Morita equivalence. (Received September 15, 2020)