

ALGEBRA SEMINAR

On fusion rules and solvability of a fusion category

Sonia Natale
University of Cordoba

ABSTRACT: The notions of nilpotency and solvability of a fusion category C were introduced in the work of Etingof, Gelaki, Nikshych and Ostrik. It is apparent from the definition of nilpotency of a fusion category C that this property is determined by the fusion rules of C . We address the question whether the condition on a fusion category being solvable or not is also determined by its fusion rules. We shall discuss some families of examples where the answer is affirmative. In the context of spherical fusion categories, we also consider the invariant provided by the S -matrix of the Drinfeld center and show that this invariant does determine the solvability of a fusion category provided it is group-theoretical. This is joint work with Melisa Escañuela González.

FRIDAY (!), MARCH 25, 2016
3:00 – 4:00 PM (!)
ROOM 617, WACHMAN HALL
DEPARTMENT OF MATHEMATICS