Hopf25

Sebastian Burciu
Institute of Mathematics of Romanian Academy, Romania
Parallel sessions, Forum G
Thursday, April 24, 2025
16h-16h25

Ito-Michler type properties for braided fusion categories

The classical Ito-Michler Theorem states that the degree of every irreducible character of a finite group G is coprime to a prime p if and only if a Sylow p-subgroup of G is abelian and normal. The proof of this theorem is notably intricate, relying on the Classification of Finite Simple Groups. In this talk, we explore the analogous situation for braided fusion categories. In the modular case, we find that the Ito-Michler-type result arises naturally as a consequence of Harada's identity. Additionally, we will discuss other new implications of Harada's identity within this framework. This work is partially in collaboration with S. Palcoux.