

A categorical version of Beattie's exact sequence. Applications

B. FEMIĆ

Universidad de Almería

Since the Brauer group of a Hopf algebra was introduced by Caenepeel, our professor being honoured and Zhang several computations of this group were done for quasi-triangular Hopf algebras. In all these examples the Brauer group decomposes into a direct product containing a weird factor. We will reveal the common features of the above-mentioned computations, which will lead us to a categorical version of Beattie's exact sequence. It provides a general framework which all the preceding examples fit into and it describes the weird factor in terms of braided cohomology theory. Our sequence extends to braided monoidal categories one constructed by Fernández Vilaboa for symmetric monoidal ones. We will show that the computations of Brauer groups of triangular Hopf algebras are covered by their work, whereas our sequence treats the quasi-triangular non-triangular case. This is a joint work with professor Juan Cuadra.