



*Short Communications*

## IV Seminar on Categories and Applications

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**J. Cuadra and B. Femic, Universidad de Almería**

*A categorical version of Beattie's exact sequence. Applications*

Since the Brauer group of a Hopf algebra was introduced in [CVZ], several computations of this group were done for quasitriangular Hopf algebras, [OZ], [CC2], [CC1], [CC3]. In all these examples the Brauer group decomposes into a direct product containing a bizarre factor. We will reveal the common features of these computations, which will lead us to a categorical version of Beattie's exact sequence [B]. It provides a general framework which all the preceding examples fit into and it sharply describes the aforementioned factor in terms of algebraic invariants. Our sequence extends to braided monoidal categories the one constructed in [FV] for symmetric monoidal categories. We will show that the latter one covers the computations of Brauer groups of triangular Hopf algebras, [OZ], [CC2], [CC3] whereas ours deals with quasitriangular non-triangular ones, [CC1].

### References:

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**Contact address:** bfemic@ual.es

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