Strongly CS-Rickart objects in abelian categories

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Motivated by the work of Abyzov and Nhan on (dual) CS-Rickart modules [1], we introduced in [3] (dual) CS-Rickart objects in abelian categories as a common generalization of (dual) Rickart objects and extending (lifting) objects [2]. The concepts of (dual) Rickart objects and extending (lifting) objects in abelian categories may be specialized to those of (dual) strongly Rickart objects and strongly extending (lifting) objects by restricting the definition from direct summands to fully invariant direct summands. We present some general properties and examples, with emphasis on direct summands, (co)products of (dual) strongly relative CS-Rickart objects and classes all of whose objects are (dual) strongly self-CS-Rickart.

This is joint work with Septimiu Crivei (Babeş-Bolyai University).

References

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[3] S. Crivei, S. M. Radu, CS-Rickart and dual CS-Rickart objects in abelian categories. *arXiv:2007.11059*.