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On simple monads in ordered structures and the factorisations they induce

We recall the notion of simple monad [2, 3] in order-enriched categories, that generalises the notion of simple reflection of Cassidy-Hébert-Kelly [1], and study the factorisations they induce. These factorisations are lax orthogonal, as defined in [2], and can be characterised by a cancellation property that, once again, includes the orthogonal case studied in [1].

REFERENCES:

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- [3] M.M. Clementino and I. López Franco, Lax orthogonal factorisations in ordered structures, DMUC Preprint 17-06, University of Coimbra; arXiv 1702.02602.

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