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Matrix reduction and exact structures

Matrix reduction techniques have been used by the Kiev school to prove fundamental results in representation theory, such as the Brauer-Thrall conjectures or the tame and wild dichotomy. To formalize the matrix reduction techniques, Roiter introduced the notion of a bocs, which models matrix reductions by iterated change of categories - their objects and morphisms. We propose instead to model matrix reduction by keeping the same additive category, but changing the exact structure. A path of reductions is thus modeled by a path in the lattice of exact structures.