

Formal duality in semi-abelian categories

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Generalizing the work of Grandis on a self-dual categorical foundation for (non-additive) homological algebra, we obtain a self-dual axiom system on a faithful amnesic bifibration, which, in the case of the bifibration of subobjects of a regular category \mathbb{C} , hold precisely when \mathbb{C} is a semi-abelian category. Among other things, this gives a technique for self-dual treatment of diagram lemmas in semi-abelian categories.