

Advances in Commutative Ring Theory

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ON THE CATEGORICAL BEHAVIOUR OF ATOMIC MONOIDS

FEDERICO CAMPANINI

We study the category **AtoMon** of atomic monoids and atom-preserving maps, which is a (non-full) subcategory of the category **Mon** of monoids. We compute all limits and colimits, showing that **AtoMon** is both a complete and cocomplete category. Finally, we study some arithmetic properties of products and coproducts of atomic monoids.

Based on a joint work with Laura Cossu and Salvatore Tringali.

[1] F. Campanini, L. Cossu and S. Tringali, The Category of Atomic Monoids: Universal Constructions and Their Arithmetic Properties, *preprint*, 2024.

UNIVERSITÉ CATHOLIQUE DE LOUVAIN

Email address: `federico.campanini@uclouvain.be`