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# ALGEBRAIC CATEGORIES WITH BLURRED OBJECTS

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Abstract. Intelligent actions related to the real world depend on the information that can be obtained. Frequently, this information contains data that are either intrinsically blurry or their blurriness is due to insufficient information. We establish some algebraic categories to treat it with adjoint functors. To work accurately with blurred information and eulerithms, we introduce a certainty-degree measure. Like membership-degree of fuzzy subsets, to handle information accurately, its certainty-degree must be considered too. Evolutionary systems based on information and knowledge are also investigated.

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