

## Multicategories and varieties of many-sorted algebras

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### Abstract

We give a direct proof of the fact that every variety of many-sorted universal algebras is rationally equivalent to a variety of algebras over some FSet-multicategory (a many-sorted analog of FSet-operads). The construction of this multicategory is straightforward and uses the free algebras of the given variety. © 2008 Pleiades Publishing, Ltd.

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### Keywords

Free algebra, Many-sorted algebra, Multicategory, Rational equivalence, Variety