

Operads

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Operads are a cousin of algebraic theories. They were first seriously used in algebraic topology in the early 1970s, but have now spread much more widely. Operads have less expressive power than general algebraic theories; for example, there is an operad for monoids, but no operad for groups. The trade-off is that models (algebras) for operads can be considered in categories where models for algebraic theories cannot. I will give an overview of some of the theory of operads and what has been done with it.