

FIBRED ALGEBRAIC THEORIES

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This talk gives a report on the recent joint work with D. Bourn, where we show how certain exactness properties studied in modern categorical algebra can be viewed as Mal'tsev conditions in the sense of universal algebra, adapted to “categorical terms”. In particular, in the present talk we show that for any category, the corresponding “categorical terms” constitute a “fibred algebraic theory”, which is defined as a fibration of algebraic theories of a particular type. Thus we obtain a general procedure which associates to a category a “fibred algebraic theory”, which in some sense mimics the procedure of associating an algebraic theory to a variety of universal algebras.