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Proof normalization modulo. (English) Zbl 1059.03062

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Summary: We define a generic notion of cut that applies to many first-order theories. We prove a generic cut-elimination theorem showing that the cut-elimination property holds for all theories having a so-called pre-model. As a corollary, we retrieve cut elimination for several axiomatic theories, including Church's simple type theory.

MSC:

03F05 Cut-elimination and normal-form theorems

03B35 Mechanization of proofs and logical operations

Cited in 11 Documents

Keywords:

higher-order logic; rewrite systems; first-order theories; pre-model; cut elimination; simple type theory

Software:

Automath; Coq

Full Text: [DOI](#) [Euclid](#)

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