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A safe relational calculus for functional logic deductive databases. (English) Zbl 1270.68101

Brim, Lubos (ed.) et al., WFLP 2003. Selected papers of the 12th international workshop on functional and constraint logic programming (in connection with RDP'03, Federated conference on rewriting, deduction and programming), Valencia, Spain, June 12–13, 2003. Amsterdam: Elsevier. Electronic Notes in Theoretical Computer Science 86, No. 3, 168-204 (2003).

Summary: In this paper, we present an extended relational calculus for expressing queries in functional-logic deductive databases. This calculus is based on first-order logic and handles relation predicates, equalities and inequalities over partially defined terms, and approximation equations. For the calculus formulas, we have studied syntactic conditions in order to ensure the domain independence property. Finally, we have studied its equivalence w.r.t. the original query language, which is based on equality and inequality constraints.

For the entire collection see [[Zbl 1271.68025](#)].

MSC:

[68P15](#) Database theory
[03B70](#) Logic in computer science
[68N17](#) Logic programming
[68N18](#) Functional programming and lambda calculus
[68Q42](#) Grammars and rewriting systems

Cited in **2** Documents

Software:

[BABEL](#); [TOY](#)

Full Text: [Link](#)

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