On the Fluted Fragment

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— Abstract -

The *fluted fragment* is a recently rediscovered decidable fragment of first-order logic whose history is dating back to Quine and the sixties of the 20th century. The fragment is defined by fixing simultaneously the order in which variables occur in atomic formulas and the order of quantification of variables; no further restrictions concerning e.g. the number of variables, guardedness or usage of negation apply. In the talk we review some motivation and the history of the fragment, discuss the differences between the fluted fragment and other decidable fragments of first-order logic, present its basic model theoretic and algorithmic properties, and discuss recent work concerning limits of decidability of its extensions.

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