

Reduction operators and completion of linear rewriting systems

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In rewriting theory, the confluence property guarantees the coherence of calculi. In this talk, we study the confluence property for linear rewriting systems defined by reduction operators. We use this approach to provide a lattice description of obstructions to confluence. We deduce lattice formulations of the completion procedure as well as a method for extending linear rewriting systems so that they become confluent.

Keywords: Reduction operators, Lattice structure, Confluence, Completion procedure

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