

Feasible Interpolation in Proof Systems based on Integer Linear Programming

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Abstract

Feasible interpolation has been proved for several proof systems based on integer linear programming. To prove such a theorem one has to design a polynomial time algorithm. The methods which are used to design these algorithms range from a very simple algorithm, used in the cutting plane proof system, to semidefinite programming, used in a version of Lovász-Schrijver proof system. This reflects the increasing strength of the proof systems.