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*Extracting information of unsatisfiable formulas using Semidefinite certificates of infeasibility*

It is known that if a semidefinite programming (SDP) relaxation of a satisfiability (SAT) instance is infeasible, then the SAT instance is unsatisfiable. Moreover, when the SDP relaxation is infeasible, we can exhibit a proof in the form of an SDP certificate of infeasibility. We can extract information about the SAT instance from the SDP certificate of infeasibility. In particular, we illustrate how the SDP certificate of infeasibility can provide information about minimal unsatisfiable sub-formulas.