Simulated Annealing and its application to timetable problems

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Abstract Simulated Annealing (1983) is recognised as the oldest metaheuristic technique in the scientific literature. Despite its age, it is still very popular in academic publications and practical applications. In this tutorial, we review the basic components of Simulated Annealing and we discuss and classify its uncountable variants, some of which gained their own names and metaphors (Great Deluge, Threshold Accepting, ...). In addition, we show the application of Simulated Annealing to some timetabling problems and discuss its results on available benchmarks.

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