

Editorial

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Two of the papers in this issue were developed from presentations at a workshop investigating the combination of metaheuristic and local search with constraint programming techniques. This workshop was held in Nantes during November, 2005.

The paper by Carchrae and Beck considers large neighbourhood search (LNS) and proposes three principles for the effective use of LNS. When these principles are applied to job shop scheduling, some impressive results are obtained.

Jonglet, Oğuz and Sevaux present a paper also on scheduling. They address a k-stage flow shop problem where each job is composed of multiprocessor tasks and each stage has a number of identical parallel machines. The paper describes a memetic algorithm and compares its performance with both a genetic algorithm and a constraint programming based branch-and-bound algorithm.

The JMMA cooperated with the organisers of the workshop, viz. Sophie Demasse, Xavier Gandibleux and Narendra Jussien from the École des Mines de Nantes, France, Fabien Le Huédé from Thales, France, Marc Sevaux from the University of Bretagne Sud-Lorient, France and Kenneth Sörensen from the University of Antwerp, Belgium.

We are grateful for their help in organising the submission and reviewing of these papers.

Alongside these two papers, this issue contains three other papers, all of which are regular submissions. One of these by Chvatal, Raidl and Oberlechner also uses a metaheuristic. Their paper describes the use of both a memetic algorithm and GRASP on an interesting fingerprint compression problem important in biometrics.

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The final two papers concern classic problems in graph theory. The paper by Markopoulou and Severeni uses a quantum theory approach to the classical problems of counting Eulerian trails and Hamiltonian cycles in graphs. That by Velié, May and Moresi considers the construction of a discrete Voronoi diagram.

The JMMA continues to attract high quality papers and we continue to strive for speedy publication. I am grateful to all our anonymous referees who continue to support the journal by putting in hours of unpaid work and who produce detailed and expert advice to our authors.

Vic Rayward-Smith
Editor-in-Chief