Solution Archives for Metaheuristics

Benjamin Biesinger

June 26, 2015

ALGORITHMS AND
COMPLEXITY GROUP

Solution Archives for Metaheuristics

Problem:

Re-visits of already generated solution candidates can lead to:

- Unnecessary possibly time-consuming evaluations
- Loss of diversity in population based metaheuristics
- Premature convergence

Solution:

Solution Archives

- Not only store but also **convert** duplicates into new solutions
- Combines metaheuristics with (exact) tree search methods
- Finds the optimal solution (given enough space and time)