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Sommario/riassunto

This book constitutes the refereed proceedings of the 18th European Conference on Evolutionary Computation in Combinatorial Optimization, EvoCOP 2018, held in Parma, Italy, in April 2018, co-located with the Evo* 2018 events EuroGP, EvoMUSART and EvoApplications. The 12 revised full papers presented were carefully reviewed and selected from 37 submissions. The papers cover a wide spectrum of topics, ranging from the foundations of evolutionary computation algorithms and other search heuristics, to their accurate design and application to both single- and multi-objective combinatorial optimization problems. Fundamental and methodological aspects deal with runtime analysis, the structural properties of fitness landscapes, the study of metaheuristics core components, the clever design of their search principles, and their careful selection and configuration by means of automatic algorithm configuration and hyper-heuristics. Applications cover conventional academic domains such as NK landscapes, binary quadratic programming, traveling salesman, vehicle routing, or scheduling problems, and also include real-world domains in clustering, commercial districting and winner determination.