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Sommario/riassunto

This book constitutes the thoroughly refereed post-conference proceedings of the 11th International Conference on Large-Scale Scientific Computations, LSSC 2017, held in Sozopol, Bulgaria, in June 2017. The 63 revised short papers together with 3 full papers presented were carefully reviewed and selected from 63 submissions. The conference presents results from the following topics: Hierarchical, adaptive, domain decomposition and local refinement methods; Robust preconditioning algorithms; Monte Carlo methods and algorithms; Numerical linear algebra; Control and optimization; Parallel algorithms and performance analysis; Large-scale computations of environmental, biomedical and engineering problems. The chapter 'Parallel Aggregation Based on Compatible Weighted Matching for AMG' is available open access under a CC BY 4.0 license. .