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	Nota di contenuto	Detecting disaster before it strikes: On the challenges of automated building and testing in HPC environments -- Saving Energy Using the READEX Methodology -- The MPI Tool Interfaces: Past, Present, and Future—Capabilities and Prospects -- A tool for runtime analysis of performance and energy usage in NUMA systems -- Usage experiences of performance tools for modern C++ code analysis and optimization -- Performance Analysis of Complex Engineering Frameworks -- System-wide Low-frequency Sampling for Large HPC Systems -- Exploring Space-Time Trade-Off in Backtraces -- Enabling Performance Analysis of Kokkos Applications with Score-P -- Regional Profiling for

Efficient Performance Optimization -- Effortless Monitoring of Arithmetic Intensity with PAPI's Counter Analysis Toolkit -- ONE View: a fully automatic method for aggregating key performance metrics and providing users with a synthetic view of HPC applications -- A picture is worth a thousand numbers – Enhancing Cube's analysis capabilities with plugins -- Advanced Python Performance Monitoring with Score-P.

Sommario/riassunto	This book presents the proceedings of the 12th International Parallel Tools Workshop, held in Stuttgart, Germany, during September 17-18, 2018, and of the 13th International Parallel Tools Workshop, held in Dresden, Germany, during September 2-3, 2019. The workshops are a forum to discuss the latest advances in parallel tools for high-performance computing. High-performance computing plays an increasingly important role for numerical simulation and modeling in academic and industrial research. At the same time, using large-scale parallel systems efficiently is becoming more difficult. A number of tools addressing parallel program development and analysis has emerged from the high-performance computing community over the last decade, and what may have started as a collection of a small helper scripts has now matured into production-grade frameworks. Powerful user interfaces and an extensive body of documentation together create a user-friendly environment for parallel tools.