1.	Record Nr.	UNINA9910299771503321
	Titolo	Tools for High Performance Computing 2014 : Proceedings of the 8th International Workshop on Parallel Tools for High Performance Computing, October 2014, HLRS, Stuttgart, Germany / / edited by Christoph Niethammer, José Gracia, Andreas Knüpfer, Michael M. Resch, Wolfgang E. Nagel
	Pubbl/distr/stampa	Cham : , , : Springer International Publishing : , , : Imprint : Springer, , 2015
	ISBN	3-319-16012-5
	Edizione	[1st ed. 2015.]
	Descrizione fisica	1 online resource (235 p.)
	Disciplina	004 004.24 510
	Soggetti	Computer mathematics Computer system failures Application software Computational Science and Engineering System Performance and Evaluation Computer Applications
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Note generali	Description based upon print version of record.
	Nota di bibliografia	Includes bibliographical references.
	Nota di contenuto	Ilya Zhukov, Christian Feld, Markus Geimer, Michael Knobloch, Bernd Mohr and Pavel Saviankou: Scalasca v2: Back To The Future -- Christopher January, Jonathan Byrd, Xavier Oró, and Mark O'Connor: Allinea MAP: Adding Energy and OpenMP Profiling Without Increasing Overhead -- Zhen Li, Rohit Atre, Zia Ul-Huda, Ali Jannesari, and Felix Wolf: DiscoPoP: A Profiling Tool to Identify Parallelization Opportunities -- Vladimir Subotic, Arturo Campos, Alejandro Velasco, Eduard Ayguade, Jesus Labarta, and Mateo Valero: Tareador: The Unbearable Lightness of Exploring Parallelism -- Isaías A. Comprés Ureña, and Michael Gerndt: Tuning Plugin Development for the Periscope Tuning Framework -- Thomas Ilsche, Joseph Schuchart, Robert Schöne and Daniel Hackenberg: Combining Instrumentation and Sampling for

Trace-based Application Performance Analysis -- Damien Dosimont, Youenn Corre, Lucas Mello Schnorr, Guillaume Huard and Jean-Marc Vincent: Ocelotl: Large Trace Overviews Based on Multidimensional Data Aggregation -- Felix Schmitt, Robert Dietrich and Jonas Stolle: Integrating Critical-Blame Analysis for Heterogeneous Applications into the Score-P Workflow -- Germán Llort, Harald Servat, Juan Gonzalez, Judit Gimenez and Jesús Labarta: Studying Performance Changes with Tracking Analysis -- Martin Schulz, Abhinav Bhatele, David Böhme1, Peer-Timo Bremer, Todd Gamblin, Alfredo Gimenez and Kate Isaacs: A Flexible Data Model to Support Multi-Domain Performance Analysis.

| Sommario/riassunto | Numerical simulation and modelling using High Performance Computing has evolved into an established technique in academic and industrial research. At the same time, the High Performance Computing infrastructure is becoming ever more complex. For instance, most of the current top systems around the world use thousands of nodes in which classical CPUs are combined with accelerator cards in order to enhance their compute power and energy efficiency. This complexity can only be mastered with adequate development and optimization tools. Key topics addressed by these tools include parallelization on heterogeneous systems, performance optimization for CPUs and accelerators, debugging of increasingly complex scientific applications, and optimization of energy usage in the spirit of green IT. This book represents the proceedings of the 8th International Parallel Tools Workshop, held October 1-2, 2014 in Stuttgart, Germany – which is a forum to discuss the latest advancements in the parallel tools. |