Guest Editor’s Introduction: Special Section on the Eurographics Symposium on Parallel Graphics and Visualization (EGPGV)

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This special section on parallel graphics and visualization includes extended versions of two best papers from the Eurographics Symposium on Parallel Graphics and Visualization (EGPGV) in 2011. EGPGV 2011 was held in Llandudno Wales, at Venue Cymru from 10-11 April 2011. It was the 11th event of this successful series of symposia, and was colocated with the Eurographics Annual Conference. For more information on EGPGV symposia and their supporting Eurographics Working Group on Parallel Graphics, please visit http://www.egpgv.org.

EGPGV 2011 received 32 submissions, which were reviewed by an International Program Committee with 16 members and a few external reviewers selected by the committee members. Each submission received three or more reviews. The final program contained 14 papers organized into five sessions, i.e., image processing, rendering, ray/particle tracing, geometry, and visualization. A keynote entitled “Exascale Visualization: Get Ready for a New World” was presented by Hank Childs.

Based on the reviewer’s comments and scoring as well as the quality of the oral presentations at EGPGV 2011, a committee that consisted of the symposium chair, the two paper cochairs, and additional members, selected two best papers to be invited for submission to this special section of the IEEE Transactions on Visualization and Computer Graphics (TVCG). The authors considerably extended their papers to include new additional material. The extended articles then underwent a full journal reviewing process.

The paper “Parallel Computational Steering for HPC Applications Using HDF5 Files in Distributed Shared Memory” by John Biddiscombe, Jerome Soumagne, Guillaume Oger, David Guibert, and Jean-Guillaume Piccinni presents a framework allowing an engineer or a scientist to enhance a parallel code using HDF5 extensions and XML templates so that it can communicate directly with a ParaView server and permit live visualization, analysis, and steering in parallel.

We would like to thank the IPC and external reviewers for EGPGV 2011 and the reviewers of the extended submissions who have made this special section possible. We would also like to thank the Symposium Chair, Torsten Kuhlen, and the entire EG conference organization team for organizing a great conference and helping with the original EGPGV 2011 paper selection.

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