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Soggetti	Algorithms Computer networks Software engineering Computer programming Computer engineering Computer simulation Computer Communication Networks Software Engineering Programming Techniques Computer Engineering and Networks Computer Modelling
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Nota di contenuto	Compile time Correctness Checks and Optimization -- SPMD IR Unifying SPMD and Multi Value IR Showcased for Static Verification of Collectives -- Annotation of Compiler Attributes for MPI Functions -- Limitations and Extensions for GPGPUs in MPI -- Understanding GPU Triggering APIs for MPI X Communication -- Stream Support in MPI without the Churn -- Improvements for MPI -- Improved MPI Collectives for 3D FFT -- To Share or Not to Share A Case for MPI in Shared Memory -- MPI Ecosystem -- Dynamic Resource Management for In Situ Techniques using MPI Sessions -- MPI BugBench A Framework for Assessing MPI Correctness Tools.

Sommario/riassunto

This volume LNCS constitutes the refereed proceedings of 31st European MPI Users' Group Meeting, EuroMPI 2024, held in Perth, WA, Australia, during September 25-27, 2024. The 8 full papers presented here were carefully reviewed and selected from 19 submissions. These papers have been categorized under the following topical sections: Compile-time Correctness checks and optimization; Limitations and Extensions for GPGPUs in MPI; Improvements for MPI and MPI Ecosystem.