1. Record Nr. UNISA996691672003316

Autore	Schuchart Joseph
Titolo	Recent Advances in the Message Passing Interface : 32nd European MPI Users' Group Meeting, EuroMPI 2025, Charlotte, NC, USA, October 1–3, 2025, Proceedings / / edited by Joseph Schuchart, Aurelien Bouteiller, Sascha Hunold, Julien Jaeger, Christoph Niethammer, Brian Smith
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2026
ISBN	3-032-07194-1
Edizione	[1st ed. 2026.]
Descrizione fisica	1 online resource (253 pages)
Collana	Lecture Notes in Computer Science, , 1611-3349 ; ; 15977
Altri autori (Persone)	BouteillerAurelien HunoldSascha JaegerJulien NiethammerChristoph SmithBrian
Disciplina	004.6
Soggetti	Computer networks Software engineering Computer programming Computer engineering Computer simulation Algorithms Computer Communication Networks Software Engineering Programming Techniques Computer Engineering and Networks Computer Modelling
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	-- On the Potential of Compression Hiding in MPI Applications. -- Implementing True MPI Sessions and Evaluating MPI Initialization Scalability. -- Layout-Agnostic MPI Abstraction for Distributed Computing in Modern C++. -- Verifying MPI API Usage Requirements with Contracts. -- Review of MPI Continuations and Their Integration into PMPI Tools. -- MPI Finally Needs to Deal with Threads. --

	Performance analysis of Open MPI on AMR applications over Slingshot-11. -- Examining MPI and its Extensions for Asynchronous Multithreaded Communication. -- Extending the SPMD IR for RMA Models and Static Data Race Detection. -- Concepts for designing modern C++ interfaces for MPI.
Sommario/riassunto	This book constitutes the proceedings of the 32nd European MPI Users' Group Meeting, EuroMPI 2025, held in Charlotte, NC, USA, during October 1–October 3, 2025. The 10 full papers presented in this book were carefully reviewed and selected from 16 submissions. EuroMPI is the premier forum for users, developers, and researchers to exchange ideas on MPI and its applications.