Bibliography For William Gropp

[1] mat04:report


[5] alma03:mpibgl


[7] alma05:mpi-impl:bgl

[8] ala04:mpi:bgl
George Almási, Charles Archer, José G. Casta nos, John Gunnels, Chris
Erway, Philip Heidelberger, Xavier Martorell, José E. Moreira, Kurt PIN-
now, Joe Ratterman, Burkhard Steinmacher-burow, William Gropp, and
Brian Toonen. The design and implementation of message passing services
for the BlueGene/L supercomputer. Technical Report ANL/MCS-P1183-
0604, Mathematics and Computer Science Division, Argonne National
Laboratory, June 2004.

[9] agkks-sc99-fun3d
Smith. Achieving high sustained performance in an unstructured mesh
High Performance Networking and Computing. IEEE Computer Society,
2000-2.

W. Kyle Anderson, William D. Gropp, Dinesh Kaushik, David E. Keyes,
and Barry F. Smith. Achieving high sustained performance in an unstruc-
tured mesh CFD application. Technical Report ANL/MCS-P776-0899,
Mathematics and Computer Science Division, Argonne National Labora-

Sara S. Baghsorkhi, Matthieu Delahaye, Sanjay J. Patel, William D.
Gropp, and Wen-mei W. Hwu. An adaptive performance modeling tool for
GPU architectures. In R. Govindarajan, David A. Padua, and Mary W.
Hall, editors, Proceedings of the 15th ACM SIGPLAN Symposium on
Principles and Practice of Parallel Programming, PPOPP 2010, Banga-

[12] baik02:cluster-middleware
Seongbok Baik, Cynthia S. Hood, and William D. Gropp. Prototype of
AM3: Active mapper and monitoring module for Myrinet environment.
In HSLN (High-Speed Local Networks) workshop, pages 703–707, 2002.

[13] bak03:cluster01
Mark Baker, Daniel Katz, William Gropp, and Thomas Sterling. Special
issue: Cluster 2001. Concurrency and Computation: Practice and

[14] conf/icpp/BalajiBPTG07
Pavan Balaji, S. Bhagvat, Dhabaleswar K. Panda, Rajeev Thakur, and
William Gropp. Advanced flow-control mechanisms for the sockets direct
protocol over Infiniband. In ICPP [2], page 73.

[15] conf/ipps/BalajiBBSTG07
Pavan Balaji, Darius Buntinas, S. Balay, B. Smith, Rajeev Thakur, and
William Gropp. Nonuniformly communicating noncontiguous data: A
case study with PETSc and MPI. In IPDPS [3], pages 1–10.


[24] **Balay97**

[25] **petsc-user-ref**

[26] **petsc-cse15**

[27] **petsc-user-ref-3-0**

[28] **PETScUsers**

[29] **alice-siamoo-98**


[31] **bgms00:petsc-chapt**
Satish Balay, William Gropp, Lois Curfman McInnes, and Barry F. Smith.

[32] bala03:sourcebook:pdesoft

[33] barmangroopsaltz89

[34] besa89


[36] DBLP:conf/sc/BhateleJGK11

[37] conf/ipps/BhateleJGWGK11

[38] bla03:cray-eval
[39] **bw-in-vetter13**

[40] **boleygropp81**

[41] **Bolstad:1979:NAP**

[42] **applmath08**

[43] **bunt05:mpi-impl**

[44] **buntinas05:common_comm_subsys**

[45] **data_transfer2006**
[46] nemesis-design-tr

[47] buntinas06:nemesis

[48] buntinas06:nemesis:shm

[49] bush00:petsc

[50] bus01:petsc-perf

[51] bgl00:mpd-short

[52] bgl00:mpi-mpd-tr


[61] caigroppkeyes91

[62] caigropp97

[63] caigroppkeyestidriri94

[64] Cai:1992:CSD

[65] Cai:1992:CRE


[67] CalhounOlsonSnirGropp:2015:FR_AMG

[68] FranckCappello11012009
[69] cappello14-resilience


[71] carns2012case

[72] 10.1109/SC.Companion.2012.19

[73] chan08-bg-fft

[74] chan02:scalable-log

[75] chan08:slog2

[76] PPoPP2006
Ernie Chan, William Gropp, Rajeev Thakur, and Robert van de Geijin. Collective communication on architectures that support simultaneous

[77] cgk91:dd-transport


[79] chen2012decoupled

[80] conf/ipps/ChenSTRG11

[81] chin03a:mpi-io

[82] ching-io-02

[83] ching-io-03

[84] ching04:parallel-io
Avery Ching, Alok Choudhary, Wei keng Liao, Robert Ross, and William

[85] DBLP:journals/ijhpcn/ChingCLRG04

[86] NAP18972

[87] pvmmpi99-totalview

[88] pvmmpi99-totalview-tr

[89] dgw02:wan-ftp

[90] dg02:wan-ftp

[91] contextid-12


[93] Dongarra01022011

[94] crpchandbook

[95] dozsa-threads-10

[96] gropp93

[98] evans03:network

[99] EVA03.soft

[100] falz05:mpi-impl

[101] falz07:mpi-debug

[102] 6702642

[103] nes06

[104] forsman95
[105] **forsman95rpt**

[106] **ppsc95*225**

[107] **mpi-1-standard**

[108] **mpi-nexus-pc**

[109] **ppsc91*307**

[110] **FGS**

[111] **of03:sourcebook:pgmmodels**

[112] **icpp90*3*35**
[113] **alice-infrastructure**  

[114] **frei99:num-soft**  

[115] **gahvari10**  

[116] **conf/ics/GahvariBSYJG11**  

[117] **DBLP:conf/icpp/GahvariGJSY12**  

[118] **conf/ipps/GahvariGJSY13**  

[119] **Gahvari15-AMG-Dragonfly**  

[120] **ppsc93•160**  


Christopher Gottbrath, Brian Barrett, William D. Gropp, Ewing "Rusty" Lusk, and Jeff SQuyres. An interface to support the identification of dynamic MPI 2 processes for scalable parallel debugging. In Bernd Mohr, Jesper Larsson Träff, Joachim Worringen, and Jack Dongarra, editors,

[127] Greengard88

[128] ppsc87*213

[129] greengardgropp90

[130] Gropp86a

[131] Gropp88c

[132] Gropp88a


[144] 6636318

[150] gkks:cfd-hiperf-tr

[151] gkks:cfd-perf
[152] gkks:cfd-scal-perf00

[153] gkks:cfd-hiperf-art

[154] gkks:cfd-perf-proc

[155] GKS00

[156] WDGropp_DEKeyes_1989b

[157] WDGropp_DEKeyes_1990a

[158] WDGropp_DEKeyes_1991a

[159] WDGropp_DEKeyes_1992c

[160] WDGropp_DEKeyes_1992a
[161] siamssc-92/128:gwd

[162] WDGropp_DEKeyes_JSMounts_1994a

[163] WDGropp_DEKeyes_MDTidriri_1995a


[165] gropp-odonnell84

[166] WDGropp_BFSmith_1994a

[167] Gropp87b

[168] gro90:par-comp


William Gropp. Challenges and successes in achieving the potential of MPI. In Y. Cotronis and J. Dongarra, editors, Recent Advances in Parallel

[178] gropp01:mpi-misc

[179] gropp02:mpi-generic

[180] DBLP:conf/pvm/Gropp02

[181] gro03:sourcebook:poisson

[182] gro03:mpitrends

[183] gro03:sourcebook:

[184] gro03:beowulf:use

[185] qcdoc03:trends
RIKEN BNL Research Center, February 2003. Abstract and six major slides from the presentation.

[186] grop04:par-soft

[187] gro04:mpi-pgming

[188] gro05:progmodels

[189] Gropp07GridSummary

[190] 1612212


[192] mpi-success-12

[193] xpacc-cse15
William Gropp. Building performance transportable codes for extreme

[194] fpmpi

[195] Grop07Grid

[196] UsingAdvancedMPI

[197] conf/pvm/GroppHTT11


[199] gkmt-nks00

[200] gkmt-nks-98-preprint
[201] gkmt-nks-98

[202] gropp06:_paral_tools_envir

[203] GroppWilli92a

[204] pvmmpi99-mpptest-tr

[205] gro03:beowulf:mpi2

[206] gro03:beowulf:mpi1

[207] gropp04:mpi-fault


[209] gropp-lusk-skjellum:using-mpi2nd


[210] UsingMPI3rd

[211] beowulflinux2nd

[212] gropp-swider-lusk99

[213] gropp-lusk-thakur:usingmpi2

[214] DBLP:conf/pvm/GroppL02

[215] DBLP:conf/pvm/GroppL03

[216] sc13-specialissue

[217] gro04a:pario
[218] gro04:par-io;tr

[219] gro88:par-cfd

[220] WilliamGropp11012009

[221] gro05:mpi-rma-impl

[222] pmodels-mpi:15


[224] gropp-thesis

[225] gropp83

[226] groppLUMR87


[29] gropp-nla87

[30] groppadapt88

[31] gropp-dyngrid89

[32] gropp91


[34] bfort-manual

[35] doctext-manual
[236] tohtml-manual

[237] groppdebug97

[238] gropp-mppm97

[239] gropppetsc97

[240] groppmaui97

[241] gro:mpi-datatypes:pvmpi00

[242] gro00:mpi-impl

[243] gro01:mpi-lessons
[244] **grop02:mpi-impl:generic**

[245] **gro04:par-issues**

[246] **DBLP:conf/pvm/Gropp04**

[247] **gro04-bk:par-issues**

[248] **DBLP:conf/pvm/Gropp08**
William D. Gropp. MPI and hybrid programming models for petascale computing. In Lastovetsky et al. [337], pages 6–7.

[249] **1608633**

[250] **conf/ics/Gropp11**

[251] **gropfoulser89**
[252] **Gropp:BGMS:07**

[253] **ghs-pm-siamcse11**


[255] **groppkaper94**

[256] **groppkaper96**

[257] **gropp00performance**

[258] **gkks00:fun3d**

[259] **gropp06:radtransport**
[260] groppkeyes89

[261] groppkeyes90


[264] ppsc89*295

[265] groppkeyes90b

[266] groppkeyes91a

[267] groppkeyes91

[268] groppkeyes-asym92
[269] groppkeyes92

[270] groppkeyesmcinnestidriri97

[271] DBLP:conf/pvm/GroppKRTT08

[272] gropp06:ppsurvey

[273] gropplusk94

[274] mpich-install

[275] mpich-user

[276] groppluskpvmmpi97

[277] groppluskpvmmpi97
[278] pvmpi99-mpptest
William D. Gropp and Ewing Lusk. Reproducible measurements of MPI
performance characteristics. In Jack Dongarra, Emilio Luque, and Tomás
Margalef, editors, Recent Advances in Parallel Virtual Machine and Mes-
sage Passing Interface, volume 1697 of Lecture Notes in Computer Sci-
cence, pages 11–18. Springer Verlag, 1999. 6th European PVM/MPI Users’
Group Meeting, Barcelona, Spain, September 1999.

[279] grop02:mpi-pvm
William D. Gropp and Ewing Lusk. Goals guiding design: PVM and
MPI. In William Gropp, Rob Pennington, Dan Reed, Mark Baker, Maxine
Brown, and Rajkumar Buyya, editors, Proceedings of IEEE Cluster, pages

[280] gro04:mpi
William D. Gropp and Ewing Lusk. Fault tolerance in MPI pro-
grams. International Journal of High Performance Computer Applica-

[281] groppluskieper94
William D. Gropp, Ewing Lusk, and Steven Pieper. Users Guide for the
ANL IBM SP1. Mathematics and Computer Science Division, Argonne

[282] groppluskppm95
William D. Gropp and Ewing L. Lusk. A taxonomy of programming
models for symmetric multiprocessors and SMP clusters. In W. K. Giloi,
S. Jahnichen, and B. D. Shriver, editors, Programming Models for Mas-
vibly Parallel Computers, pages 2–7. IEEE Computer Society Press, Oc-
tober 1995.

[283] GroppMcInnesSmith95
William D. Gropp, Lois Curfman McInnes, and Barry Smith. Scalable li-
braries for solving systems of nonlinear equations and unconstrained mini-
Conference: October 12–14, 1994, Mississippi State University, Missis-
sippi, pages 60–67, 1109 Spring Street, Suite 300, Silver Spring, MD 20910,

[284] GroppWilli1995a
William D. Gropp, Lois Curfman McInnes, and Barry F. Smith. Using
the scalable nonlinear equations solvers package. Technical Memorandum

[285] groppmore97rpt
William D. Gropp and Jorge Moré. Optimization environments and
the NEOS server. Technical Report ANL/MCS-P654-0397, Mathematics
and Computer Science Division, Argonne National Laboratory, March

[286] groppschultz89

[287] groppschultz90

[288] SLES-manual

[289] KSP-manual

[290] Chameleon-manual

[291] groppsmith95


[294] groppsmith90
[295] grop06:mpi:threads
William D. Gropp and Rajeev Thakur. Issues in developing a thread-safe
MPI implementation. In Bernd Mohr, Jesper Larsson Träff, Joachim Worr-
ingen, and Jack Dongarra, editors, Recent Advances in Parallel Virtual
Machine and Message Passing Interface, number LNCS 4192 in Springer
Lecture Notes in Computer Science, pages 12–21. Springer, September
2006.

[296] DBLP:conf/pvm/GroppT07
William D. Gropp and Rajeev Thakur. Revealing the performance of MPI
RMA implementations. In Cappello et al. [70], pages 272–280.

[297] guo2013applications
D. Guo and W. Gropp. Applications of the streamed storage format
for sparse matrix operations. International Journal of High Performance

[298] GuoGropp10
Dahai Guo and William Gropp. Optimizing sparse data structures for
matrix-vector multiply. International Journal of High Performance Com-

[299] Guo01022014
Dahai Guo and William Gropp. Applications of the streamed storage
format for sparse matrix operations. International Journal of High Per-

[300] Guo14072015
Dahai Guo, William Gropp, and Luke N Olson. A hybrid format for better
performance of sparse matrix-vector multiplication on a GPU. Interna-

[301] grop-hedstrom83
G. W. Hedstrom and William D. Gropp. The computer as an aid in the
asymptotic estimation of integrals. Technical Report UCRL-87297,
Lawrence Livermore National Laboratory, August 1983.

[302] herbin87
R. H. Herbin, W. D. Gropp, D. E. Keyes, and V. Sonnad. A domain de-
composition technique on a loosely coupled array of processors. Technical

[303] mpi-mpi-hybrid-programming
T. Hoeffer, J. Dinan, D. Buntinas, P. Balaji, B. Barrett, R. Brightwell,
W. Gropp, V. Kale, and R. Thakur. MPI + MPI: a new hybrid approach
to parallel programming with MPI plus shared memory. Journal of Com-

38


[311] kale2011weighted

[312] kale-mpi-10

[313] conf/iwomp/KaleG15

[314] conf/pvm/KaleRG14

[315] ksfglb00:mpi-collective

[316] kar02:mpi-impl

[317] kdSFGLB00:mpi-ngi
Nicholas T. Karonis, Bronis R. de Supinski, Ian Foster, William Gropp,

[318] kaushik08-tensor

[319] kend06:pde

[320] kettunenforsman93

[321] kettunen94

[322] kettunenforsmanlevinegropp94

[323] KEYES85

[324] DEKeyes_WDGropp_1989a

[325] **DEKeyes_WDGropp_1991a**

[326] **DEKeyes_WDGropp_AEcder_1989a**

[327] **scalesv1-03**

[328] **scalesv2-04**

[329] **nsf-soft10**


[331] **Keyes:1989:DDL**

[332] **keyesgropp90**
[333] **Keyes:1990:DDT**

[334] **keyesgropp92**

[335] **Keyes01022013**

[336] **KeyesMcInnesWoodwardEtAl12**

[337] **DBLP:conf/pvm/2008**
[338] DBLP:conf/pvm/LathamGRT07

[339] LevGroForKet99:petsc-coral

[340] li03:pnetcdf

[341] liu03:mpich2-infiniband

[342] liu03:mpich2-infiniband-ipdps

[343] lusk03:beowulf:pgmming

[344] conf/hpdc/LuuWGRCHPBY15

[345] mellor2010teaching

[346] mpi-2-standard
Message Passing Interface Forum. MPI2: A message passing interface

[347] ppsc89*386


[350] ong-lusk-gropp:SUT

[351] ong-lusk-gropp:SUT-tr

[352] conf/pvm/PenaCDBTG13

[353] DBLP:conf/pvm/PervezGKPTG07
Salman Pervez, Ganesh Gopalakrishnan, Robert M. Kirby, Robert Palmer, Rajeev Thakur, and William Gropp. Practical model-checking
method for verifying correctness of MPI programs. In Cappello et al. [70], pages 344–353.

[354] gopal10

[355] pervez06:formal:mpi

[356] conf/pvm/PrabhuG15

[357] conf/ipps/RandlesKHGK13

[358] conf/pvm/RashtiGBAG11

[359] ros03:mpidatatype
[360] ross04:mpi-impl:tr
R. Ross, N. Miller, and W. D. Gropp. Implementing fast and reusable
datatype processing. Technical Report ANL/MCS-P1068-0703, Math-
ematics and Computer Science Division, Argonne National Laboratory,
July 2003. Appeared in Euro PVMMPI'03.

[361] 1612222
Robert Ross, Robert Latham, William Gropp, Ewing Lusk, and Rajeev
Thakur. Processing MPI datatypes outside MPI. In Proceedings of the
16th European PVM/MPI Users’ Group Meeting on Recent Advances in
Parallel Virtual Machine and Message Passing Interface, pages 42–53,

[362] ross:mpi-io:atomic
Robert Ross, Robert Latham, William Gropp, Rajeev Thakur, and Brian
Toonen. Implementing MPI-IO atomic mode without file system sup-
port. Technical Report ANL/MCS-P1235-0305, Mathematics and Com-
puter Science Division, Argonne National Laboratory, March 2005.

[363] rfgkst00:mpichg-qos-sc
Alain Roy, Ian Foster, William Gropp, Nicholas Karonis, Volker Sander,
and Brian Toonen. MPICH-GQ: Quality of service for message passing

[364] rfgkst00:mpichg-qos
Alain Roy, Ian Foster, William Gropp, Nicholas Karonis, Volker Sander,
and Brian Toonen. MPICH-GQ: Quality of service for message pass-
ing programs. Technical Report ANL/MCS-P838-0700, Mathematics and
Computer Science Division, Argonne National Laboratory, July 2000.

[365] sack-exascale-10
Paul Sack and William Gropp. A scalable MPI_Comm_split algorithm for
exascale computing. In Rainer Keller, Edgar Gabriel, Michael Resch, and
Jack Dongarra, editors, Recent Advances in the Message Passing Inter-
face, volume 6305 of Lecture Notes in Computer Science, pages 1–10. Springer

Paul Sack and William Gropp. Faster topology-aware collective algo-
rithms through non-minimal communication. In Proceedings of the 17th
ACM SIGPLAN symposium on Principles and Practice of Parallel Pro-
gramming, PPoPP ’12, pages 45–54, New York, NY, USA, 2012. ACM.
Best Paper.

Paul Sack and William Gropp. Collective algorithms for multiported torus
[368] 1577927
G. Santhanaraman, P. Balaji, K. Gopalakrishnan, R. Thakur, W. Gropp,
and D. K. Panda. Natively supporting true one-sided communication in
MPI on multi-core systems with Infiniband. In CCGRID ’09: Proceedings
of the 2009 9th IEEE/ACM International Symposium on Cluster Com-
Computer Society.

[369] jms04:grid

[370] DBLP:conf/pvm/SharmaVGKTG08
Subodh Sharma, Sarvani S. Vakkalanka, Ganesh Gopalakrishnan,
Robert M. Kirby, Rajeev Thakur, and William Gropp. A formal approach
to detect functionally irrelevant barriers in MPI programs. In Lastovetsky
et al. [337], pages 265–273.

[371] shen:accel
Baifei Shen, Yuelin Li, Karoly Nemeth, Hairong Shang, Yong chul Chae,
Robert Soliday, Robert Crowell, Edward Frank, William Gropp, and John
Cary. Electron injection by a nanowire in the bubble regime. Physics of

[372] 5725240
M. Showerman, J. Enos, C. Steffen, S. Treichler, W. Gropp, and W.-
m.W. Hwu. EcoG: A power-efficient GPU cluster architecture for scientific
2011.

[373] SkjellumAn1994a
Anthony Skjellum, Ewing Lusk, and William Gropp. Early applications
in the message passing interface (MPI). Technical report, Department of
Computer Science, Mississippi State University, June 1994.

Anthony Skjellum, Ewing Lusk, and William Gropp. Early applications
in the Message-Passing Interface (MPI). International Journal of Su-
percomputer Applications and High Performance Computing, 9(2):79–94,
Summer 1995.

[375] cfd2030tr
Jeffrey Slotnick, Abdollah Khodadoust, Juan Alonso, David Darmofal,
William Gropp, Elizabeth Lurie, and Dimitri Mavriplis. CFD Vision 2030
study: A path to revolutionary computational aerosciences. Technical

[376] slotnick2014enabling
Jeffrey P Slotnick, Abdollah Khodadoust, Juan J Alonso, David L Darmo-
fal, William D Gropp, Elizabeth A Lurie, Dimitri J Mavriplis, and Venkat

[377] BFSmith_PEBjorstad_WDGropp_1996a

[378] smithgropp96


[380] tg00:io-chapt

[381] tha03:mpicollective

[382] thakur03:mpi-coll

[383] thak03:sourcebook:mpiio

[384] conf/aPcsac/ThakurG07

[385] DBLP:conf/pvm/ThakurG07
Rajeev Thakur and William Gropp. Test suite for evaluating performance of MPI implementations that support MPI_THREAD_MULTIPLE. In Cappello et al. [70], pages 46–55.

[386] thakur09:MPIthreads

[387] ThakurGroLus96

[388] thakur:abstract-tr

[389] thakur:evaluation

[390] thakur:evaluation-tr

[391] ROMIOUsers

[392] thakurgroplusk-datasieving98
Rajeev Thakur, William Gropp, and Ewing Lusk. Data sieving and collective I/O in ROMIO. Technical Report ANL/MCS-P723-0898, Math-

[393] **thakur-gropp-lusk-mpiio**

[394] **thakurfrontiers99**

[395] **thak99b**

[396] **tgl02:mpiio**

[397] **ree04:mpi-io**

[398] **tha04:mpi-impl**

[399] **thak04:mpi-impl;rmr**

[400] **thak05:mpi-impl;rmr**
[401] thak05:mpi-impl:rma:preprint

[402] thak:astrophysics

[403] thakurluskgropp-io97

[404] thakurluskgropp-datatype98:sc98

[405] thakurluskgropp-datatype98

[406] thakurluskgropp98

[407] thak04:mpi-impl:coll

[408] thak05:mpi-impl:coll

[409] 1679706
Vinod Tipparaju, William Gropp, Hubert Ritzdorf, Rajeev Thakur, and Jesper L. Träff. Investigating high performance RMA interfaces for the

[410] toas01:bnr-design

[411] DBLP:conf/pvm/TraffGT07
Jesper Larsson Träff, William Gropp, and Rajeev Thakur. Self-consistent MPI performance requirements. In Cappello et al. [70], pages 36–45.

[412] traff2010

[413] DBLP:conf/pvm/TraffRSBTG08

[414] JesperLarssonTraff02012010

[415] DBLP:conf/pvm/VakkalankaDGKTG08
Sarvani S. Vakkalanka, Michael Delisi, Ganesh Gopalakrishnan, Robert M. Kirby, Rajeev Thakur, and William Gropp. Implementing efficient dynamic formal verification methods for MPI programs. In Lastovetsky et al. [337], pages 248–256.

[416] vin01:mpi-impl

[417] deflatedgmress13
[418] wagg01:linux-petsc

[419] SC00-CD-ROM*50


[421] 1598125

[422] zaki-lusk-gropp-swider99

[423] zaki-lusk-gropp-swider99-techrpt

[424] 6808175

[425] conf/ccgrid/ZhaoBG15
[426] 6844416

[427] zhao13-am-mpi

[428] adaptive-rma-12

[429] 1612262

[430] zima:hppl04