

Part V

# Appendices



## **Staff**

MCSD consists of full time permanent staff located at NIST laboratories in Gaithersburg, MD and Boulder, CO. This is supplemented with a variety of faculty appointments, guest researchers, postdoctoral appointments, and student appointments. The following list reflects the status at the end of FY 2005.

**Legend:** F = Faculty Appointee, GR = Guest Researcher, PD = Postdoctoral Appointee, S = Student, PT= Part time

### **Division Staff**

Ronald Boisvert, *Chief*  
 Robin Bickel, *Secretary*  
 Jeffrey Fong, PT  
 Roldan Pozo  
 Chris Schanzle

### **Mathematical Modeling Group**

Geoffrey McFadden, *Leader*  
 Bradley Alpert (Boulder)  
 Timothy Burns  
 Alfred Carasso  
 Andrew Dienstfrey (Boulder)  
 Michael Donahue  
 Fern Hunt  
 Raghu Kacker  
 Anthony Kearsley  
 Peter Ketcham  
 Stephen Langer  
 Agnes O'Gallagher (Boulder)

Donald Porter

Mirit Aladjem, GR  
 Daniel Anderson, GR  
 Eric Baer, S  
 Richard Braun, F  
 Katharine Gurski, GR  
 Seung-Il Haan, GR  
 Sohyoung Kim, GR  
 Dianne O'Leary, F  
 Florian Potra, F  
 Richard Yeh, GR

### **Mathematical Software Group**

Daniel Lozier, *Leader*  
 Marjorie McClain  
 Bruce Miller  
 William Mitchell  
 Bert Rust  
 Bonita Saunders

Bruce Fabijonas, F  
 Leonard Maximon, GR  
 Frank Olver, GR  
 G.W. Stewart, F  
 Abdou Youssef, F

### **Optimization and Computational Geometry Group**

Ronald Boisvert, *Acting Leader*  
 Isabel Beichl  
 Javier Bernal  
 David Gilsinn

Emanuel Knill (Boulder)  
 Theodore Einstein, GR  
 Saul Gass, F

Scott Glancy, PD  
James Lawrence, F  
Sita Ramamurti, GR  
David Song, GR

Francis Sullivan, GR  
Christoph Witzgall, GR

### **Scientific Applications and Visualization Group**

Judith Terrill, *Leader*  
Yolanda Parker, *Office Manager*  
Robert Bohn  
William George  
Terence Griffin  
John Hagedorn  
Howard Hung

John Kelso  
Adele Peskin (Boulder)  
Steven Satterfield  
James Sims

Julien Lancien, GR  
Alexandre Thibau, S

### **Staff Leaving the Division During FY 2005**

Joyce Conlon

David Cotrell, PD  
Ioan Sucas, GR  
Anocha Yimsiriwattana, GR

Brian Cordes, S  
Justin Haaheim, S  
Jarrett Inn, S  
Javier Sanchez, S  
Gaurav Thakur, S  
Benjamin Zoeller, S

## **Acronyms**

ACM	Association for Computing Machinery
AIP	American Institute of Physics
AMS	American Mathematical Society
ANSI	American National Standards Institute
APS	American Physical Society
ASME	American Society of Mechanical Engineers
ATP	NIST Advanced Technology Program
BFRL	NIST Building and Fire Research Laboratory
BLAS	Basic Linear Algebra Subprograms
CARB	NIST Center for Advanced Research in Biotechnology
CCS	IDA Center for Computing Sciences
CEM	computational electromagnetics
CFM	confocal fluorescence microscopy
CIO	Chief Information Officer
CSTL	NIST Chemical Science and Technology Laboratory
CWI	Centrum voor Wiskunde en Informatica (Amsterdam)
DARPA	Defense Advanced Research Projects Agency
DIVERSE	Device Independent Virtual Environments — Reconfigurable, Scalable, Extensible (visualization software)
DLMF	Digital Library of Mathematical Functions (MCSD project)
DOD	Department of Defense
DOE	Department of Energy
DPD	dissipative particle dynamics
DSO	distributed shared object
EEEL	NIST Electronics and Electrical Engineering Laboratory
FY	fiscal year
GAMS	Guide to Available Mathematical Software
GMR	giant magneto-resistance
IDA	Institute for Defense Analysis
ITL	NIST Information Technology Laboratory
IFIP	International Federation for Information Processing
IMA	Institute for Mathematics and Its Applications (Univ. of Minnesota)
JAMA	Java Matrix package
LADAR	Laser Distance and Ranging
MCSD	ITL Mathematical and Computational Sciences Division
MEL	NIST Manufacturing Engineering Laboratory
MIM	Molecular interaction map
MPI	Message Passing Interface
MRAM	magnetic random access memory
MSEL	NIST Materials Science and Engineering Laboratory
NBS	National Bureau of Standards (former name of NIST)
NIST	National Institute of Standards and Technology
NOAA	National Oceanographic and Atmospheric Administration
NSF	National Science Foundation

OCM	optical coherence tomography
OOF	Object-Oriented Finite Elements (software package)
OOMMF	Object-Oriented Micromagnetic Modeling Framework (software package)
PDE	partial differential equation
PHAML	Parallel Hierarchical Adaptive Multi Level (software)
PL	NIST Physics Laboratory
QDPD	quaternion-based dissipative particle dynamics
RAM	random access memory
RAVE	Reconfigurable Automatic Virtual Environment
SAVG	MCSA Scientific Applications and Visualization Group
SED	NIST/ITL Statistical Engineering Division
SEM	scanning electron microscope
SIAM	Society for Industrial and Applied Mathematics
SIGGRAPH	ACM Special Interest Group on Graphics
SPIE	The International Society for Optical Engineering
SSS	Screen Saver Science
SURF	Student Undergraduate Research Fellowship
SVD	singular value decomposition
TIN	triangulated irregular network
TNT	Template Numerical Toolkit
VCCTL	Virtual Cement and Concrete Testing Laboratory