

Topical Groups of the Society

FEW-BODY SYSTEMS AND MULTIPARTICLE DYNAMICS founded in 1985, examines the interactions of few body systems in a wide spectrum of fields including elementary particles, nuclear atomic, molecular, solid state, and astrophysics.

GRAVITATION established in 1995, focuses on experiments and observations related to the detection and interpretation of gravitational waves, experimental tests of gravitational theories, solutions to Einstein's equations, computational general relativity, relativistic astrophysics, alternative theories of gravity, classical and quantum cosmology and quantum gravity.

HADRONIC PHYSICS was formed in 2001 to provide a focus for the study of strongly interacting matter in all of its manifestations. This includes spectroscopy, lattice gauge theory, structure physics, heavy ion physics, jet physics, and QCD at high energy and at finite temperature and density.

INSTRUMENT AND MEASUREMENT SCIENCE formed in 1984, to advance the precision of measurements and the development of instrument and measurement science. GIMS members are scattered across virtually all the physics disciplines.

MAGNETISM AND ITS APPLICATIONS established in 1996, focuses on the technological aspects and applications of magnetism by fostering interactions among multidisciplinary scientists and engineers.

PLASMA ASTROPHYSICS formed in 1998, seeks a common ground between plasma physics and astrophysics, and involves the application of fundamental concepts of plasma physics to the solution of outstanding problems in astrophysics.

PRECISION MEASUREMENT AND FUNDAMENTAL CONSTANTS established in 1987, focuses on research related to investigating and testing the fundamental laws of physics and their underlying connections, determining fundamental constants, and developing and improving basic measurement standards with special emphasis on high-precision experiments.

QUANTUM INFORMATION, CONCEPTS AND COMPUTATION formed in 2004, focuses on fundamental problems of quantum theory, such as entangled states; quantum information, including quantum cryptography; and quantum computing.

SHOCK COMPRESSION OF CONDENSED MATTER founded in 1984, promotes the development and exchange of information on the dynamic high-pressure properties of materials, shock physics, and detonation physics research.

STATISTICAL AND NONLINEAR PHYSICS TOPICAL GROUP, established in 1996, encourages research and applications in the interdisciplinary area of equilibrium statistical physics with a special emphasis on nonlinear systems.

TOPICAL GROUPS

INSTRUMENT AND MEASUREMENT SCIENCE TOPICAL GROUP Established 1984

Chair (Past to Present)

L. Rubin
J. Schooley
J. Matey
R. Anderson
A. Clarke
G. Miller
K. Jaeger
R. Erdman
R. Soulen
B. Brandt
J. Griffith
E. Jones
R. Duncan
D. Seiler
D. Rickel
E. Palm
A. Macrander
K. Waldrip
C. MacDonald
C. Agosta

GIMS Secretary-Treasurer

R. Higgins
E. Jones
B. Brandt
A. Mandelis
C. Armstrong

SHOCK COMPRESSION OF CONDENSED MATTER TOPICAL GROUP Established 1984

Chair (Past to Present)

W. Nellis
G. Straub
S. Schmidt
J. Forbes
Y. Gupta
L. Chhabildas
J. Johnson
D. Curran
T. Ahrens
J. Asay
J. Shaner
N. Holmes
D. Dandekar

S. Sheffield
M. Furnish
S. Bless
B. Holian
C. Tarver
J. Boteler
D. Funk II
D. Dlott

GSCCM Secretary-Treasurer

J. Forbes
S. Schmidt
E. LeMar
J. Boteler
R. Chau

FEW-BODY SYSTEMS AND MULTIPARTICLE DYNAMICS TOPICAL GROUP Established 1985

Chair (Past to Present)

F. Levin
D. Micha
E. Redish
R. Drachman
B. Gibson
J. Macek
R. Berry
F. Gross
K. Kulander
J. Friar
C. Chandler
B. Schneider
D. Skopik
J. McGuire
V. Brown
T. Rescigno
R. Schiavilla
C. Whelan
W. Tornow
W. Reinhardt
W. Polyzou

GFB Secretary-Treasurer

T.-K. Lim
D. Kouri
C. Carlson
C. Elster

PRECISION MEASUREMENT AND FUNDAMENTAL CONSTANTS TOPICAL GROUP Established 1987

Chair (Past to Present)

A. Rich
B. Taylor
R. Ritter
D. Bartlett
L. Hunter
E. Adelberger
G. Green
D. Heinzen
S. Lundeen
P. Bender
P. Mohr
R. Deslattes
B. Heckel
J. Faller
R. Walsworth
C. Tanner
S-A. Lee
E. Hessels
S. Lamoreaux

GPMFC Secretary-Treasurer

C. Carter
H. Gould
W. Itano
*D. Shiner
D. Church

GRAVITATION TOPICAL GROUP Established 1995

Chair (Past to Present)

B. Berger
K. Thorne
A. Ashtekar
R. Weiss
C. Will
R. Wald
R. Price
J. Friedman
J. Isenberg
J. Pullin
E. Flanagan
D. Brill
D. Garfinkle

GGR Secretary-Treasurer
1995-1998 J. Isenberg

1999-2002 D. Garfinkle
2003-2006 P. Brady
2006- V. Sandberg

**MAGNETISM AND ITS
APPLICATIONS
TOPICAL GROUP
Established 1996**

Chair (Past to Present)

D. Jiles
C. Patton
L. Bennett
S. Foner
J. Lynn
D. Sellmyer
F. Hellman
P. Schiffer
J. Bass
J. Rhyne
D. Reich
W. Butler

GMAG Secretary-Treasurer

1996-2004 R. Van Dover
2004- C. Ross

**STATISTICAL AND
NONLINEAR PHYSICS
TOPICAL GROUP
Established 1996**

Chair (Past to Present)

K. Sreenivasen
G. Ahlers
C. Grebogi
R. Ecke
D. Campbell
R. Behringer
M. Robbins
C. Doering
H. Levine
M. C. Marchetti
S. Redner

GSNP Secretary-Treasurer

1996-2001 J. Carlson
2001-2004 J. Urbach
2004- D Lathrop

**PLASMA ASTROPHYSICS
Established 1998**

Chair (Past to Present)

B. Remington
J. Chen
R. Drake
E. Liang
A. Bhattacharjee
P. Bellan
P. Liewer
H. Li
S. Spangler
H. Ji

GPAP Secretary-Treasurer

1998 – 2006 S. Spangler
2006- T. Intrator

**HADRONIC PHYSICS
Established 2001**

Chair (Past to Present)

A. Dzierba
E. Swanson
T. Barnes
E. Kinney
C. Roberts
C. Meyer

GHP Secretary-Treasurer

S. Seidel
W. Melnitchouk

**QUANTUM INFORMATION,
CONCEPTS, AND
COMPUTATION
Established 2004**

Chair (Past to Present)

C. Bennett
C. Caves
L. Viola
D. DiVincenzo

GQI Secretary – Treasurer

2006- B. Sanders