

# Divisions of the Society

*ASTROPHYSICS* organized in 1970, engages in observational and theoretical investigation of physical processes in stars and other discrete galactic sources, galactic structure and evolution, the early history and evolution of the Universe, and the Sun and solar activity.

*ATOMIC, MOLECULAR, AND OPTICAL PHYSICS* founded in 1943, was the first division of the APS. DAMOP is concerned with frontier research of atoms, simple molecules, and light. The scope includes theory and experiments on the application of fundamental principles of these systems.

*BIOLOGICAL PHYSICS* founded in 1973, examines biological systems using modern physics techniques and other aspects of the relationships between biology and physics.

*CHEMICAL PHYSICS* established in 1950, bridges the interface between chemistry and physics.

*COMPUTATIONAL PHYSICS* founded in 1986, explores the use of computers in physics research and education as well as the role of physics in the development of computer technology.

*CONDENSED MATTER PHYSICS* established in 1947, concentrates on such topics as superconductivity, semi-conductors, magnetism, complex fluids, and thin films. A broad range of physical problems, both applied and basic, are investigated.

*FLUID DYNAMICS* established in 1947, emphasized the dynamics of the liquid, plastic, and gaseous states of matter under wide ranges of temperature and pressure.

*LASER SCIENCE* established in 1985, involves the development and use of lasers in science and the application of lasers in technology. DLS co-sponsors meetings and symposia with other professional societies to improve communications between disparate laser science communities.

*MATERIALS PHYSICS* established in 1984, applies fundamental condensed matter concepts to complex and multiphase media, including materials of technological interest.

*NUCLEAR PHYSICS* founded in 1966, studies the constituent parts, structure, disintegration, interactions, and other properties of nuclei. It includes inter-disciplinary

areas such as the nuclear physics of stars and early Universe.

*PARTICLES AND FIELDS* was established in 1967, to advance the knowledge of the structure, interactions, and inter-relationships of the fundamental particles and fields, and instrumentation techniques for high-energy physics.

*PHYSICS OF BEAMS* established in 1985, is concerned with the nature and behavior of beams including particle beams, their radiation, and the instruments for their production and use.

*PLASMA PHYSICS* established in 1959, studies matter in the plasma state and assemblages of charged particles of natural and laboratory origin from both the basic science and application points of view.

*POLYMER PHYSICS*, organized in 1944, closely examines the theoretical and experimental physics of natural and synthetic macromolecular substances.

## DIVISIONS

### **DIVISION OF ATOMIC, MOLECULAR & OPTICAL PHYSICS**

#### **Established 1943**

“Division of Electron and Ion Optics.” Name altered 1947 to “Division of Electron Physics.” Name altered 1966 to “Division of Electron and Atomic Physics.” Name altered 1986 to “Division of Atomic, Molecular and Optical Physics.”

#### **Chair (Past to Present)**

I. Rabi  
L. Marton  
L. Smith  
J. Peirce  
W. Nottingham  
L. Malter  
R. Bowie  
S. Brown  
J. Johnson  
D. Alpert  
G. Moore  
R. Sproull  
A. Coomes  
H. Hagstrum  
M. Biondi  
W. Dyke  
V. Stout  
L. Branscomb  
E. Mueller  
V. Hughes  
G. Weissler  
W. Fite  
J. Arol Simpson  
E. Lipworth  
R. Geballe  
S. Borowitz  
P. Bender  
F. Smith  
H. Foley  
G. King Walters  
A. Schawlow  
B. Bederson  
F. Pipkin  
S. Smith  
N. Lane  
E. Merzbacher  
M. Rudd  
B. Crasemann  
A. Dalgarno  
D. Kleppner  
H. Kelly

R. Stebbings  
R. Deslattes  
W. Lineberger  
W. Johnson  
G. Dunn  
A. Starace  
P. Dehmer  
D. Wineland  
T. Gallagher  
C. Lin  
R. Freeman  
G. Drake  
K. Kirby  
C. Wieman  
S. Lundeen  
D. Larson  
S. Delos  
C. Greene  
F. Dunning  
J. McGuire  
C. Clark  
T. Gay  
W. Stwalley  
P. Meystre

#### **DAMOP Secretary-Treasurer**

1944-1946 J. Peirce  
1947-1950 G. Moore  
1951-1953 R. Sproull  
1954-1956 H. Hastrum  
1956-1958 V. Stout  
1959-1961 P. Hartman  
1962-1964 J. Arol Simpson  
1965-1967 G. Allen  
1968-1970 S. Smith  
1971-1974 F. Pichanick  
1974-1977 C. Lin  
1977-1980 T. Miller  
1980-1984 P. Dehmer  
1984-1987 K. Kirby  
1987-1991 W. Smith  
1991-1993 J. McGuire  
1993-1995 R. Phaneuf  
1995-1997 F. Dunning  
1998-2002 T. Gay  
2003- 2005 C. L. Cocke  
2005 – D. Schultz

### **DIVISION OF POLYMER PHYSICS**

#### **Established 1944**

#### **Chair (Past to Present)**

J. Dillon  
W. Busse  
H. Robinson

L. Wood  
H. James  
J. Liska  
W. Davidson  
J. Nichols  
M. Huggins  
R. Boyer  
J. Ferry  
R. Marvin  
T. Fox  
A. Bueche  
E. Fitzgerald  
H. Leaderman  
W. Slichter  
H. Markovitz  
J. Gibbs  
T. DeWitt  
R. Stein  
H. Keith  
E. Passaglia  
J. Hoffman  
W. James Lyons  
M. Williams  
W. Statton  
P. Lindenmeyer  
R. Eby  
R. Porter  
J. Lauritzen, Jr.  
J. O'Reilly  
A. Eisenberg  
A. Gent  
S. Petrie  
E. DiMarzio  
F. Karasz  
S. Matsuoka  
E. Baer  
I. Sanchez  
D. Reneker  
R. Boyd  
W. Prest, Jr.  
E. Helfand  
J. Blackwell  
J. Rabolt  
E. Kramer  
G. McKenna  
H. Yu  
T. Russell  
M. Tirrell  
E. Thomas  
J. Koberstein  
T. Lodge  
E. Amis  
A. Balazs  
K. Schweizer  
S. Milner  
R. Colby  
F. Bates

R. Register  
M. Muthukumar  
S. Granick  
A. Mayes  
M. Ediger

**DPOLY Secretary**  
1944-1950 W. Lyons

**DPOLY Treasurer**  
1944-1946 L. Wood  
1947-1949 R. Spencer  
1950 J. Liska

**DPOLY Secretary-Treasurer**  
1951-1967 W. Lyones  
1968-1988 F. Padden, Jr.  
1988-1993 S. Carr  
1993- B. Farmer

## **DIVISION OF CONDENSED MATTER PHYSICS**

### **Established 1947**

“Division of Solid State Physics.” Name  
altered 1978 to “Division of Condensed  
Matter Physics.”

### **Chair (Past to Present)**

R. Smoluchowski  
W. Shockley  
A. von Hippel  
F. Seitz  
H. Brooks  
C. Smith  
J. Bardeen  
C. Kittel  
C. Zener  
S. Quimby  
J. Slater  
C. Herring  
J. Van Vleck  
P. Ewald  
C. Shull  
R. Morse  
L. Apker  
H. Huntington  
M. Tinkham  
R. Parmenter  
J. Krumhansl  
H. Ehrenreich  
M. Cohen  
J. Schrieffer  
V. Jaccarino  
G. Vineyard  
R. Bowers  
B. Chandrasekhar

R. Simmons  
M. Cohen  
D. Langenberg  
H. Fritzsche  
S. Foner  
J. Quinn  
L. Falicov  
D. Scalapino  
G. Vineyard  
M. Klein  
N. Ashcroft  
M. Maple  
P. Stiles  
P. Fleury  
R. Orbach  
A. Fetter  
A. Fowler  
J. Franz  
J. Clem  
R. Richardson  
D. Lang  
J. Langer  
D. Litster  
R. Webb  
J. Clarke  
G. Crabtree  
D. Gubser  
J. Wilkins  
S. Nagel  
S. Coppersmith  
D. Tanner  
J. Phillips  
A. Goldman

### **DCMP Secretary-Treasurer**

1947 W. Shockley  
1948-1949 A. Lawson  
1950-1956 C. Smith  
1957-1960 E. Burstein  
1961-1964 J. Smart  
1965-1968 W. Smith  
1969-1973 M. Fiske  
1973-1977 M. Nathan  
1977-1981 E. Conwell  
1981-1985 H. Hart, Jr.  
1985-1988 J. Herbst  
1988-1993 L. Brillson  
1993-1995 L. Feldman  
1995-1997 D. Gubser  
1998-2003 D. Bishop  
2003- 2004 J. Crow  
2004 – 2006 J. Serene  
2006- A. Dorsey

## **DIVISION OF FLUID DYNAMICS**

### **Established 1947**

### **Chair (Past to Present)**

R. Seeger  
H. Dryden  
J. Kirkwood  
A. Kantrowitz  
R. Ladenburg  
J. Hirschfelder  
H. Liepmann  
F. Frenkiel  
S. Chandrasekhar  
S. Schaaf  
G. Schubauer  
F. Frenkiel  
W. Elsasser  
F. Frenkiel  
C. Lin  
F. Frenkiel  
H. Grad  
S. Corrsin  
F. Frenkiel  
O. Laporte  
R. Emrich  
R. Fowler  
P. Kelbanoff  
F. Frenkiel  
R. Gross  
R. Donnelly  
M. Plessett  
C. Yih  
D. Bershader  
W. Griffith  
C. Treanor  
T. Maxworthy  
S. Davis  
A. Acrivos  
R. Kelly  
J. Whitehead, Jr.  
R. Donnelly  
J. Lumley  
R. Nerem  
L. Talbot  
J. Lumley  
S. Davis  
S. Leibovich  
G. Homsy  
K. Sreenivasan  
T. Wu  
F. Browand  
D. Kassoy  
L. Redekopp  
H. Aref  
C. Ho  
J. Riley  
A. Leonard  
R. Adrian

E. Reshotko  
D. Moin  
S. Berger  
F. Hussain  
J. Wallace  
J. Gollub  
H. Stone  
S. Pope  
A. Smits  
P. Marcus

**DFD Secretary-Treasurer**

1948 H. Emmons  
1949 W. Bleakney  
1950-1952 J. McMillen  
1953 F. Frenkiel  
1954 J. Hirschfelder  
1955-1956 F. Frenkiel  
1957 S. Schaaf  
1958-1964 R. Emrich  
1965-1966 R. Fowler  
1967-1970 R. Donnelly  
1971-1974 D. Bershader  
1975-1979 B. Sturtevant  
1979-1981 R. Peskin  
1982-1984 R. Nerem  
1984-1986 W. Reynolds  
1986-1988 J. Gollub  
1988-1992 R. Donnelly  
1992-1994 J. Riley  
1994-1996 R. Adrian  
1996-1997 A. Smits  
1997-2000 J. Lasheras  
2001-2003 H. Stone  
2003- 2006 J. Duncan  
2006-2009 E. Longmire

**DIVISION OF CHEMICAL  
PHYSICS**

**Established 1950**

**Chair (Past to Present)**

R. Mullikan  
J. Mayer  
J. Hirschfelder  
H. Nielsen  
J. Kirkwood  
G. Herzberg  
D. Horning  
E. Montroll  
R. Halford  
J. Platt  
H. McConnell  
H. Broida  
R. Parr  
C. Hutchison

M. Karplus  
E. Wilson, Jr.  
J. Decius  
R. Bernstein  
J. Bigeleisen  
R. Bersohn  
D. Herschbach  
K. Hedberg  
H. Gutowsky  
F. Kaufman  
F. Stillinger  
J. Ross  
L. Bartell  
D. Kivelson  
P. Rentzepis  
R. Gordon  
R. Berry  
W. Lineberger  
J. Waugh  
J. Jonas  
R. Zare  
W. Lester, Jr.  
S. Leone  
S. Rice  
J. Yates, Jr.  
P. Dagdigian  
A. Pines  
K. Eisenthal  
G. Schatz  
G. Scoles  
S. Sibener  
R. Silbey  
R. Hochstrasser  
W. Miller  
C. Harris  
S. Tully  
L. Butler  
R. Miller  
E. Carter  
M. Ratner  
H-L. Dai  
D. Neumark  
A. Castleman, Jr.

**DCP Secretary**

1951-1952 J. Platt  
1952-1955 B. Crawford, Jr.  
1955-1958 J. Platt

**DCP Treasurer**

1951-1958 F. Brickwedde

**DCP Secretary-Treasurer**

1958-1960 A. Frost  
1961-1964 J. Decius  
1965-1968 K. Hedberg  
1969-1974 D. Lide, Jr.

1975-1981 J. Swalen  
1981-1984 D. Burland  
1984-1991 W. Stwalley  
1991-1993 R. Pack  
1993-1998 K. Janda  
1998-2001 T. Dunning  
2001- B. Garrett

**DIVISION OF PLASMA  
PHYSICS**

**Established 1959**

**Chair (Past to Present)**

M. Gottlieb  
M. Rosenbluth  
R. Post  
T. Stix  
A. Simon  
D. Rose  
P. Sturrock  
J. Phillips  
S. Buchsbaum  
H. Grad  
T. Fowler  
J. Dawson  
D. Kerst  
N. Rostoker  
R. Gould  
A. Trivelpiece  
F. Ribe  
H. Eubank  
G. Bekefi  
B. Fried  
F. Perkins  
N. Krall  
A. Kaufman  
F. Chen  
R. Davidson  
H. Dreicer  
J. Callen  
D. Baldwin  
R. Parker  
C. Kennel  
A. Hasegawa  
N. Hershkowitz  
A. Bers  
C. Sheng Liu  
W. Kruer  
B. Ripin  
S. Prager  
R. Hazeltine  
N. Fisch  
M. Porkolab  
J. Drake  
A. Boozer  
M. Lampe

M. Mael  
D. Hammer  
J. Dahlburg  
M. Douglas  
V. Chan  
I. Hutchinson  
A. Bhattacharjee

**DPP Secretary-Treasurer**

1959-1960 A. Kolb  
1961-1963 J. Phillips  
1964-1967 G. Kelley  
1967-1970 N. Lazar  
1971-1974 G. Guest  
1974-1978 J. Johnson  
1978-1982 W. Grossman, Jr.  
1983-1987 I. Alexeff  
1987-1988 J. Rome  
1988-1991 A. Boozer, Jr.  
1991-1993 J. Rome  
1993-1999 M. Sweeney  
1999-2004 V. Chan  
2004- S. Allen

**DIVISION OF NUCLEAR  
PHYSICS**

**Established 1966**

**Chair (Past to Present)**

L. Schiff  
H. Barschall  
M. Goldhaber  
H. Feshbach  
G. Phillips  
T. Lauritsen  
F. Ajzenberg-Selove  
B. Cohen  
J. Schiffer  
S. Hanna  
J. Weneser  
P. Axel  
E. Henely  
B. Harvey  
G. Garvey  
S. Austin  
G. Bertsch  
E. Hayward  
L. Rosen  
R. Stokstad  
E. Adelberger  
S. Koonin  
R. Eisenstein  
J. Ball  
G. Crawley  
W. Haxton  
N. Benczer-Koller  
C. Dover

J. Walecka  
L. Riedinger  
B. Clark  
S. Freedman  
W. Henning  
R. Robertson  
J. Moss  
C. Glashausser  
A. Balantekin  
D. Geesaman  
B. Sherrill  
S. Seestrom  
R. Milner  
R. Casten

**DNP Secretary-Treasurer**

1966-1986 J. Harvey  
1986-1995 V. Brown  
1995- B. Gibson

**DIVISION OF PARTICLES  
& FIELDS**

**Established 1967**

**Chair (Past to Present)**

W. Panofsky  
C. Yang  
R. Marshak  
R. Hofstadter  
R. Adair  
L. Wolfenstein  
F. Low  
N. Smaios  
G. Sanow  
G. Trilling  
S. Gasiorowicz  
M. Perl  
J. Sandweiss  
K. Gottfried  
C. Baltay  
A. Mann  
J. Peoples  
J. Cronin  
S. Adler  
L. Pondrom  
B. Barish  
F. Gilman  
E. Berger  
A. Smith  
G. Feldman  
R. Peccei  
M. Zeller  
D. Cassell

F. Sciulli  
P. Grannis  
H. Georgi  
H. Gordon  
E. Beier  
C. Quigg  
S. Wojcicki  
J. Bagger  
S. Dawson  
W. Carithers  
J. Lykken  
N. Roe  
R. Cahn  
B. Kayser

**DPF Secretary-Treasurer**

1967-1971 A. Rosenfeld  
1971-1974 A. Wattenberg  
1974-1977 E. Fowler  
1977-1980 L. Pondrom  
1980-1983 R. Diebold  
1983-1986 T. Ferbel  
1986-1989 B. Pope  
1989-1992 B. Barnett  
1992-1995 R. Cahn  
1995-1997 J. Bagger  
1997-2000 C. Newman-Holmes  
2000-2003 N. Hadley  
2003-2006 P. Tuts  
2007-A. Goshaw

**DIVISION OF  
ASTROPHYSICS**

**Established 1970**

“Division of Cosmic Physics.”  
Name altered in 1983 to “Division  
of Astrophysics.”

**Chair (Past to Present)**

J. Simpson  
M. Shapiro  
P. Meyer  
F. McDonald  
P. Price  
P. Freier  
G. Clark  
R. Ramaty  
C. Waddington  
E. Stone  
M. Israel  
L. Peterson  
A. Buffington  
C. Fichtel  
J. Arons  
J. Taylor  
M. Forman  
G. Fazio

M. Harwit  
A. Guth  
K. Brecher  
J. Kurfess  
E. Chupp  
A. Harding  
F. Seward  
C. Canizares  
W. Haxton  
R. Lingenfelter  
J. Grindlay  
T. Weekes  
V. Trimble  
C. Dermer  
S. Lamb  
C. Kouvelioutou  
S. Holt  
B. Sadoulet  
J. Ryan  
N. Gehrels  
S. Kahn

**DAP Secretary-Treasurer**

1970-1973 C. Waddington, Jr.  
1972-1974 P. Freier  
1974-1976 C. Fichtel  
1976-1980 A. Buffington  
1980-1984 J. Kurfess  
1984-1988 V. Trimble  
1988-1992 F. Jones  
1992-1994 A. Olinto  
1994-1996 I. Engle  
1996-1998 P. Boyd  
1998-2000 N. Gehrels  
2000- 2004 M. Leising  
2004 – T. Strohmayer

**DIVISION OF BIOLOGICAL  
PHYSICS**

**Established 1973**

**Chair (Past to Present)**

F. Hutchinson  
E. Gregg  
A. Brill  
G. Loew  
L. Grossweiner  
A. Bearden  
S. Krimm  
R. Coleman  
R. Knox  
R. Shulman  
G. Lang  
J. Hopfield  
P. Debrummer  
L. Powers

P. Lauterbur  
H. Berg  
W. Webb  
A. Brill  
E. Greenbaum  
J. Nagle  
R. Callender  
S. Williamson  
S. Lindsay  
I. Giaever  
D. Rousseau  
F. Moss  
B. West  
E. Uzgiris  
M. Spano  
R. Austin  
R. Goldstein  
D. Rousseau  
P. Jung  
M. Gunner  
R. D. Astumian  
J. Glazier

**DBP Secretary-Treasurer**

1973-1976 L. Grossweiner  
1976-1980 L. Finegold  
1980-1984 H. Shields  
1984-1988 E. Greenbaum  
1988-1992 E. Mielczarek  
1992-1999 E. Prohofsky  
2000-2004 P. Gailey  
2004- S. Chan

**DIVISION OF MATERIALS  
PHYSICS**

**Established 1984**

Established as a Topical Group in  
1984; Established as a Division in  
1990

**Chair (Past to Present)**

R. Thomson  
F. Young  
S. Moss  
B. Appleton  
J. Silcox  
S. Picraux  
J. Poate  
F. Spaepen  
H. Birnbaum  
P. Percy  
J. Gibson  
G. Cargill III  
J. Roberto  
J. Davenport  
F. Hellman

P. Mooney  
L. Feldman  
D. McWhan  
J. Chelikowsky  
S. Bader  
L. Boatner  
D. Vanderbilt  
J. Lynn  
I. Schuller

**DMP Secretary-Treasurer**

1984-1986 N. Peterson  
1986-1990 R. Thomson  
1990-1993 F. Young  
1993-1996 S. Moss  
1996-2002 S. Bader  
2002- T. Einstein

**DIVISION OF LASER  
SCIENCE**

**Established 1985**

Established as a Topical Group in  
1985; Established as a Division in  
1996

**Chair (Past to Present)**

C. Collins  
T. McIlrath  
S. Chu  
W. Stwalley  
R. Freeman  
A. Tam  
D. Grischkowsky  
W. Lineberger  
P. Dehmer  
J. Eberly  
P. Houston  
W. Phillips  
R. Boyd  
M. Lester  
T. Heinz  
W. Smith  
J. Hepburn  
M. Raizen  
H. Metcalf  
L. Hollberg  
M. Johnson  
N. Bigelow

**DLS Secretary-Treasurer**

F. Tittel  
N. Kurnit  
W. Itano  
J. Miller  
W. Smith  
R. Freeman  
D. Elliott

J. Fourkas

**DIVISION OF PHYSICS OF BEAMS**

**Established 1985**

Established as a Topical Group on Particle Beam Physics in 1985;  
Established as a Division in 1989

**Chair (Past to Present)**

J. Leiss  
E. Knapp  
A. Sessler  
R. Briggs  
H. Grunder  
H. Edwards  
J. Rees  
R. Siemann  
C. Pellegrini  
M. Reiser  
W. Herrmannsfeldt  
J. Peoples  
A. Chao  
R. Davidson  
A. Dragt  
R. Ruth  
N. Phinney  
G. Dugan  
T. Roser  
J. Bisognano  
S. Holmes

**DPB Secretary-Treasurer**

1985-1999 M. Month  
1998-2002 I. Ben-Zvi  
2002-2006 M. Zisman  
2006 – E. Malamud

**DIVISION OF COMPUTATIONAL PHYSICS**

**Established 1986**

Established as Topical Group in 1986; Established as Division in 1991

**Chair (Past to Present)**

S. Fernbach  
J. Boris  
C. Rebbi

E. Oran  
J. Negele  
R. Swendson  
M. Creutz  
D. Barnes  
B. Klein  
M. Kalos  
D. Landau  
G. Doolen  
F. Abraham  
J. Gubernatis  
R. Peterkin  
J. Bernholc  
B. Schneider  
L. Collins  
G. Galli  
A. Chaka  
M.Y. Chou

**DCOMP Secretary-Treasurer**

1988-1990 J. Connolly  
1990-1993 D. Anderson  
1993-1995 G. Doolen  
1995-2000 B. Boghosian  
2000-2003 H. Gould  
2003-2006 M-Y. Chou  
2006- V. Crespi