



COVER Radiograph of the core of the Milky Way galaxy, ten light-years in extent, showing a new source—the Galactic Center Transient—within four light-years of the center (lower left). The radio emission from this source is thought to be a result of relativistic electrons spiraling in an intense magnetic field, which are probably from a system in which a neutron star or a black hole accretes material from its companion. See page 1538. [Image by J.-H. Zhao *et al.*]

Reports

- 1551 Evidence for Ammonium-Bearing Minerals on Ceres: T. V. V. KING, R. N. CLARK, W. M. CALVIN, D. M. SHERMAN, R. H. BROWN
- 1553 The Effect of Surface Roughness on Triton's Volatile Distribution: R. V. YELLE
- 1556 Rapid Continental Subsidence Following the Initiation and Evolution of Subduction: M. GURNIS
- 1559 Structural Memory in Pressure-Amorphized AlPO₄: J. S. TSE AND D. D. KLUG
- 1561 Bulk Chemical Characteristics of Dissolved Organic Matter in the Ocean: R. BENNER, J. D. PAKULSKI, M. MCCARTHY, J. I. HEDGES, P. G. HATCHER
- 1564 Percolation Theory, Thermoelasticity, and Discrete Hydrothermal Venting in the Earth's Crust: L. N. GERMANOVICH AND R. P. LOWELL
- 1567 Voltage-Dependent Calcium Channels in Plant Vacuoles: O. PANTOJA, A. GELLI, E. BLUMWALD
- 1570 Structure, Expression, and Antisense Inhibition of the Systemin Precursor Gene: B. MCGURL, G. PEARCE, M. OROZCO-CARDENAS, C. A. RYAN
- 1573 Transcription Factor Loading on the MMTV Promoter: A Bimodal Mechanism for Promoter Activation: T. K. ARCHER, P. LEFEBVRE, R. G. WOLFORD, G. L. HAGER
- 1576 LCMV-Specific, Class II-Restricted Cytotoxic T Cells in β 2-Microglobulin-Deficient Mice: D. MULLER, B. H. KOLLER, J. L. WHITTON, K. E. LAPAN, K. K. BRIGMAN, J. A. FRELINGER
- 1578 Immunoglobulin A-Induced Shift of Epstein-Barr Virus Tissue Tropism: J. W. SIXBEY AND Q.-Y. YAO
- 1581 Regulation of *jun*-B Messenger RNA and AP-1 Activity by Light and a Circadian Clock: J. M. KORNHAUSER, D. E. NELSON, K. E. MAYO, J. S. TAKAHASHI

Technical Comments

- 1584 Ultrasonic Hearing: R. A. DOBIE AND M. L. WIEDERHOLD; M. L. LENHARDT

Book Reviews

- 1586 Siting Hazardous Waste Treatment Facilities, Environmental Disputes, AND No Safe Place, reviewed by A. SCHNAIBERG ■ Beams and Jets in Astrophysics, M. C. BEGELMAN ■ The Natural History of the Wild Cats, J. SEIDENSTICKER ■ Vignettes: The Animal Connection ■ Books Received

Products & Materials

- 1590 DNA Fingerprinting Hybridization Membrane ■ Cell Settling Chamber ■ Graph Translation Software ■ Monoclonal Antibodies ■ Tritium-Labeled Custom Peptides ■ Tissue Engineering Products ■ Decontamination System ■ Submarine Gel System ■ Literature

Board of Directors

Leon M. Lederman
*Retiring President,
Chairman*

F. Sherwood Rowland
President

Eloise E. Clark
President-elect

Mary Ellen Avery
Francisco J. Ayala
Robert A. Frosch
Florence P. Haseltine
Alan Schriesheim
Jean'ne M. Shreeve
Chang-Lin Tien
Warren M. Washington

William T. Golden
Treasurer

Richard S. Nicholson
Executive Officer

Editorial Board

Charles J. Amtzen
Elizabeth E. Bailey
David Baltimore
William F. Brinkman
E. Margaret Burbidge
Pierre-Gilles de Gennes
Joseph L. Goldstein
Mary L. Good
Harry B. Gray
John J. Hopfield
F. Clark Howell
Paul A. Marks
Yasutomi Nishizuka
Helen M. Ranney
Robert M. Solow
Edward C. Stone
James D. Watson

Board of Reviewing Editors

John Abelson
Frederick W. Alt
Don L. Anderson
Stephen J. Benkovic
David E. Bloom
Floyd E. Bloom
Henry R. Bourne
James J. Bull
Kathryn Calame
C. Thomas Caskey
Dennis W. Choi
John M. Coffin
Bruce F. Eldridge
Paul T. Englund
Douglas T. Fearon
Harry A. Fozzard
Victor R. Fuchs

Theodore H. Geballe
Margaret J. Geller
John C. Gerhart
Roger I. M. Glass
Stephen P. Goff
Corey S. Goodman
Stephen J. Gould
Ira Herskowitz
Eric F. Johnson
Stephen M. Kosslyn
Konrad B. Krauskopf
Michael LaBarbera
Charles S. Levings III
Harvey F. Lodish
Richard Losick
Anthony R. Means
Mortimer Mishkin
Roger A. Nicoll
William H. Orme-Johnson III

Stuart L. Pimm
Yeshayau Pocker
Dennis A. Powers
Ralph S. Quatrano
V. Ramanathan
Erkki Ruoslahti
Ronald H. Schwartz
Terrence J. Sejnowski
Thomas A. Steitz
Richard F. Thompson
Robert T. N. Tjian
Emil R. Unanue
Geerat J. Vermeij
Bert Vogelstein
Harold Weintraub
Zena Werb
George M. Whitesides
Owen N. Witte
Keith Yamamoto