

## **Fall 1997 Telescope Applications Awarded Time**

**Michael A'Hearn, Yanga Fernandez, Karen J. Meech, Joseph L. Hora, William F. Hoffmann, Aditya Dayal, Lynne K. Deutsch, Giovanni G. Fazio**  
(3200) Phaethon - Size, Shape, Albedo, and Everything

**Suchitra Balachandran, John Carr, Art Champagne**  
Oxygen Isotopic Ratios as a Sensitive Test of Stellar Evolution Mode

**Jeffrey F. Bell, Kevin L. Reed, Rob Whiteley**  
IR Spectrophotometry of Asteroids

**Richard Binzel, Thomas Burbine**  
Near-Earth Asteroids: A First Near-Infrared Spectroscopic Reconnaissance

**Timothy Y. Brooke, John Carr**  
A CSHELL Search for Simple Hydrocarbons in Star-Forming Clouds

**Peter Bryant, Susanne Aalto**  
Are Compact Starbursts Really Starbursts?

**Jack E. P. Connerney, Takehiko Satoh, Richard Baron**  
Imaging and Spectroscopy of Jovian  $H_3^+$  Emissions for Galileo's Magnetospheric Campaign

**Athena Coustenis, Jean Schneider, Renald Wittemberg, Eric Chassefiere, Thomas P. Greene, Domin. Bockelee-Morvan, Heike Rauer, Alan Penny**  
Search for Absorption Signatures from the Evaporated Atmosphere of 51 Peg B

**Janet Drew, R. D. Oudmaijer, Thomas P. Greene, M. G. Hoare, D. Proga**  
A CSHELL HI Emission Line Survey of Massive YSOs

**James L. Elliot**  
Triton's Atmospheric Structure: Problems with Present Models

**Richard Elston, Jill Bechtold**  
Star Formation Rates in Damped Lyman-alpha Systems

**Yanga Fernandez, Carey M. Lisse, Michael A'Hearn, Karen J. Meech, Joseph L. Hora, William F. Hoffmann, Aditya Dayal, Lynne K. Deutsch, Giovanni G. Fazio**  
The Nucleus and Coma of Comet 55P/Tempel-Tuttle

**Michael J. Gaffey, Michael S. Kelley**

Compositional Investigation of Asteroid Families

**Andrea Ghez, Russel White**

Speckle Imaging of PMS Binaries: Resolving the Relationship Between Disks and Companions

**Jay Goguen, Torrence V. Johnson, Dennis L. Matson, Diana L. Blaney, Glenn J. Veeder**

~10 km Spatial Resolution of Io's Volcanos in 4 Simultaneous Wavelengths Using Satellite Occultations

**Jay Goguen, Torrence V. Johnson, Dennis L. Matson, Diana L. Blaney, Glenn J. Veeder**

Galileo Support: Io's Heat Flow and Global Volcanic State from Mid-IR Radiometry

**Caitlin Griffith**The CH<sub>4</sub> Abundance in Titan's Troposphere**Patrick Hall, Richard Green**

Star Formation Rates in Candidate z=1.5-2 Cluster Galaxies

**Martha S. Hanner**

Temporal History of the Dust Coma of Comet P/Wild 2

**Joseph L. Hora, Klaus Hodapp, Jochen Eisloffel, William F. Hoffmann, Aditya****Dayal, Giovanni G. Fazio, Lynne K. Deutsch**

Mid-Infrared Imaging of Deeply Embedded Outflow Sources

**James Jackson, Lynne K. Deutsch, Alberto Bolatto**

PDRs in Extreme UV Fields: MIRAC2 Observations of W49

**Christopher M. Johns-Krull, Steven Saar, Jeff A. Valenti**

Measuring Magnetic Fields on T Tauri Stars

**Robert D. Joseph**

Formation of Elliptical Galaxies by the Merging of Spirals

**Douglas M. Kelly, Joseph L. Hora, William B. Latter, Charles E. Woodward**

Discerning the Structure and Evolution of Planetary Nebulae from Gas Kinematics

**Naoto Kobayashi, Alan Tokunaga**

Search for Substellar Objects in the NGC2024 Star Forming Cluster

**Elizabeth Lada, Robert Pina, Charles M. Telesco**

Mid-IR Observations of Disks in Young Embedded Clusters

**Terry Z. Martin, Brendan Fisher**

Mid-IR Dust Opacity of the Martian Atmosphere

**Benjamin McCall, Takeshi Oka, Tom Geballe**

Measurement of CO and H<sub>2</sub> Absorption in Molecular Clouds with Detected H<sub>3</sub><sup>+</sup>

**Roland Meier, Tobias Owen, Theodor Kostiuk, Donald E. Jennings, George McCabe, Gordon Bjoraker, Pedro V. Sada**

Determination of D/H on Titan

**Steve Miller, Nick Achilleos, Robert D. Joseph**

Spectroscopy of the Jovian Aurorae and Ionosphere During the Galileo Mission

**Michael J. Mumma, Michael DiSanti, Neil Dello Russo, Karen Magee-Sauer, Terrence W. Rettig, Robert Novak, Marina Fomenkova**

Parent Volatiles in Comets: C/1995 O1 Hale-Bopp. Measurement of the D/H Ratio and the Ortho-Para Ratio in Cometary Water, A Study of the Organics, and a Search for New Trace Parent Volatiles

**Joan R. Najita, John Carr, Robert Mathieu**

Observational Tests of Protoplanetary Disk Dynamics & Detection of Ongoing Planet Formation

**Glenn Orton, Brendan Fisher, P. Yanamandra-Fisher**

Support Observing for Galileo Atmospheric Investigations: Orbit Encounters 10-12

**Tobias Owen, Roland Meier, Byron Han, Dale P. Cruikshank**

Studies of Saturn's Satellites from 3-5 μm with NSFCAM

**Jenny Patience, Andrea Ghez**

Multiplicity Survey of Alpha Persei: Studying the Effects and Evolution of Companions

**Elisha Polomski, Charles M. Telesco**

Imaging and Spectroscopy of the Circumstellar Environments of Pre-Main-Sequence Stars

**Lisa Prato, Michal J. Simon, John Carr**

Magnetic Fields of Young Stars

**Kevin L. Reed, Jeffrey F. Bell, Michael J. Gaffey**

Thermal and Reflected Photometric Lightcurves of Asteroid (4) Vesta

**Michael E. Ressler**

Infrared Spectral Energy Distributions of YSO Infrared Companion

**J. Richer, S. Bence, C. Chandler, G. Wright**

Velocity Structure in the Bowshocks of Protostellar Jets

**Steven Saar, Jay Bookbinder**

Observations of Magnetic Fields on Cool Stars

**Michal J. Simon, Tsevi Mazeh, Lisa Prato**

IR Detection of Low Mass Secondaries in Spectroscopic Binaries

**John R. Spencer, John Stansberry, C. Dumas**

Characterizing Io's Volcanic Activity During the Galileo Tour

**L. A. Sromovsky, Kevin H. Baines, Sanjay Limaye**

Coordinated Observations of Neptune's Atmosphere

**John R. Stauffer, Mark McCaughrean**

Infrared Imaging Photometry of the Brown Dwarf Sequence in the Pleiades

**Alan N. Stockton, Gabriela Canalizo**Selecting Old Stellar Populations at  $z \sim 1.7$ **Laurence M. Trafton, Steve Miller, Jonathan Tennyson, Gilda E. Ballester**The Distribution of Auroral and Ionospheric  $H_2$  and  $H_3^+$  Emissions on Uranus**Harold A. Weaver, Timothy Y. Brooke, Gordon Chin**

Investigating Volatile Depletion in Comet 55P/Tempel-Tuttle

**Gunter R. Wiedemann, Drake Deming, Gordon Bjoraker**

Direct Detection and Mass Determination of the Planets Around 51 Peg and Ups And.