

**Harvard PhD's in the Physics Department with Astronomy Department Advisors (since 1960)\***

1962	AVRETT, EUGENE HINTON Solutions of the Equation of Radiative Transfer	Krook
1965	RYBICKI, GEORGE BRUNO Transfer of Radiation in Stochastic Media	Krook
1967	PALMER, PATRICK EDWARD Radio Frequency Recombination Spectra of Diffuse Nebulae	Lilley
1968	HEARN, DAVID RUSSELL A Search for Celestial Sources of Gamma Rays of Energy Greater than 100 MeV	Fazio
1969	MILDER, DAVID Rotating Stellar Systems	Layzer
1969	RIEKE, GEORGE HENRY A Search for Cosmic Gamma Rays by Detection of Atmospheric Cerenkov Radiation	Fazio/Bainbridge**
1961	SNYDER, RALPH BROCKETT Relativistic Energies in Isooelectronic Sequences	Layzer
1971	STEPHENS, TIMOTHY LEE, Quantum Mechanical Studies of Molecular Hydrogen	Dalgarno
1971	CAVRAK, STEPHEN JAMES JR. The Production of Atmospheric g Rays with $E_g > 10$ MeV	Fazio/Purcell **
1972	HIVELY, RAY MICHAEL Cosmology of a Cold Universe.	Layzer
1972	LEVINE, RANDOLPH HERBERT Heating of the Corona by Magnetic Acceleration of Thermal Particles.	Layzer
1975	BIENIEK, RONALD JAMES Theoretical Studies of Thermal Atomic Collisions Involving Electronic Transitions	Dalgarno
1976	ROSNER, ROBERT Some Aspects of Magnetic Field Dynamics in Astrophysical Plasmas	Layzer
1979	DA COSTA, LUIZ ALBERTO NICOLACI Effects of a Central Gas Cloud in Dense Stellar Systems.	Cameron
1979	SHORER, PHILIP Application of the Relativistic Random-Phase Approximation to the Photoexcitation and Photoionization of Atoms	Dalgarno
1985	BAND, DAVID LOUIS Non-Thermal Radiation Mechanisms and Processes in SS433 and Active Galactic Nuclei	Grindlay
1985	KAHN, RONALD NATHAN Topics in Inflationary Cosmology	Press

- 1989 GOODMAN, ALYSSA ANN Myers/Shapiro  
Interstellar Magnetic Fields: An Observational Perspective
- 1990 COUGHLIN, KATIE MARY Thaddeus  
Quasi-Periodic Taylor-Couette Flow
- 1991 COVAULT, CORBIN EDWARD Shapiro/Grindlay  
The Energetic X-ray Imaging Telescope Experiment: Instrument Development and Observations of Black Hole Candidates in Binaries
- 1991 DIGEL, SETH WILLIAM Thaddeus  
Molecular Clouds in the Distant Outer Galaxy
- 1991 ROGERS, ROBERT DERWARD Press/Field  
The Origins of the Cosmic X-Ray and Gamma-Ray Backgrounds
- 1993 MOLLAGHABABA, REZA Thaddeus  
Millimeter-Wave Spectroscopy of Three Highly Reactive Astrophysical Molecules: SiC, SiO, and C<sub>3</sub>H<sub>2</sub>
- 1994 SAVIN, DANIEL WOLF Kohl  
Absolute Measurements of Field Enhanced Dielectronic Recombination and Electron Impact Excitation
- 1995 LIN, HUAN Kirshner  
The Las Campanas Redshift Survey
- 1995 MANANDHAR, RAJ Grindlay  
Development of a New Detector for Hard X-Ray Observations of Non-Thermal Emission from Low-Mass X-Ray Binaries
- 1996 EISENSTEIN, DANIEL Daniel/Loeb  
Analytical Models for the Gravitational Formation of Objects in the Universe
- 1996 LEBACH, DANIEL Shapiro  
Applications of Very-Long-Baseline Interferometry to Tests of General Relativity
- 1998 KEETON, CHARLES Kochanek  
Using Gravitational Lenses to Study Galaxies and Cosmology
- 1999 PERNA, ROSALBA Loeb  
Theoretical Studies of Gamma-Ray Bursts
- 2000 DAW, ADRIAN NIGEL Parkinson/Smith  
Measurement of the Radiative Lifetime of the  $2s^2 2p^4 \ ^1S_0$  Metastable Level of Ne<sup>2+</sup>; a Study of Forbidden Transitions of Astrophysical Interest
- 2001 CHOU, YI Grindlay/Papaliolios\*\*  
Developments of EXITE2 and Timing Analysis of Ultra-Compact X-ray Binaries
- 2001 FOX, DAVID CHARLES Loeb  
The Structure of Clusters of Galaxies

2002	OZEL, FERYAL The Effects of Strong Magnetic and Gravitational Fields on Emission Properties of Neutron Stars	Narayan
2002	WONG, GLENN PATRICK Nuclear Magnetic Resonance Experiments Using Laser-Polarized Noble Gas	Shapiro
2002	JANZEN, PAUL HENRY An Experiment to Measure Electron Impact Excitation of Ions that have Metastable States	Kohl/Horowitz**
2005	ZHU, CHENG Gas Phase and Molecular Process	Dalgarno/Lukin**
2006	BABICH, DANIEL MICHAEL Cosmological Non-Gaussianity and Reionization	Loeb
2007	SCHULZ, ALEXIA EIRINN Astrophysical Probes of Dark Energy	White/Huth **
2007	HOFFMAN, LAUREN Orbital Dynamics in Galaxy Mergers	Loeb/Hernquist
2008	GARG, ARTI Microlensing Candidate Selection and Detection Efficiency for the Super MACHO Dark Matter Search	Stubbs
2008	SHAFEE, REBECCA Measuring Black Hole Spin	Narayan/McClintock
2009	HICKEN, MALCOLM Doubling the Nearby Supernova Type Ia Sample	C. Stubbs/R. Kirshner

\*Revised Dec 3, 2008. Does not include thesis students of SAO staff who have Physics Department appointments only.

\*\*Advisor on record in the Physics Department

