

## CURRICULUM VITAE – Shrinivas R. Kulkarni

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### Education

1983            Ph.D. (Astronomy), University of California at Berkeley  
1978            M.S. (Physics), Indian Institute of Technology, New Delhi

### Positions

2001-            McArthur Professor of Astronomy & Planetary Sciences, Caltech  
1997-2000      Executive Officer, Astronomy, Caltech, Pasadena  
1996-2001      Professor of Astronomy and Planetary Sciences, Caltech, Pasadena  
1992-1995      Professor of Astronomy, Caltech, Pasadena  
1990-1992      Associate Professor of Astronomy, Caltech, Pasadena  
1987-1990      Assistant Professor of Astronomy, Caltech, Pasadena  
1985-1987      Robert A. Millikan Fellow in Radio Astronomy, Caltech, Pasadena  
1983-1985      Post-doctoral Fellow, Radio Astronomy Laboratory, U. C. Berkeley

### Visiting Positions

2002            Salpeter Lecturer, Cornell University  
2000-2001      Visiting Professor and Harris Lecturer, MIT, Cambridge  
1995            Miller Visiting Professor, Univ. of California, Berkeley (April-May)  
1995            Visiting Scholar, University of Georgia System (March)  
1994            Spring Lecturer in Astrophysics, Princeton University (May)  
1993            Visiting Professor, ISAS, Japan (March-June)  
1992            Visiting Scientist, Arecibo Observatory, NAIC (Oct-Dec)

### Professional Services (A Selection)

2002            Cornell University (NAIC Director Selection)  
2000-            Interdisciplinary Scientist, Space Interferometry Mission (SIM), NASA  
2001-            Chair, Chandra Users Group, NASA  
2000-            Co-PI, SIM Key Project for Extra-solar Planet Searches, NASA  
1998            Member, Working Group on Substellar Mass Objects, National Academy of Sciences  
1998-            Member, Chandra Users group  
1998-            Member, Keck Interferometer Science Steering Group, NASA  
1997-            Member, Visiting Committee, Arecibo Observatory, Cornell U.  
1995            Member, Beyond HST, AURA

### Synergetic Activities

My principal expertise and interests are the study of compact objects and the search and study of sub-stellar objects and planets. I am very keen to develop new methodologies in each of these areas. Educating graduate students and mentoring post-doctoral fellows, particularly by giving them opportunities beyond a narrow astronomical experience (made by possible by encouraging development of instrumentation or methodologies, helping develop access to premier instruments around the world, international collaboration) is perhaps my best contribution. My students and postdocs are found in academia and high tech industries. The instruments that we have developed (CPSR, FPTM, BCPM etc) have been made available to the entire community.

My interests are quite broad and are listed below. In addition to mentoring and advising I have served on a number of national committees (listed above). On an average, on an annual basis, I give about six talks to the general public (ranging from schools to astronomy clubs).

## SELECTED BIBLIOGRAPHY

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“A Millisecond Pulsar”
- B2 Kulkarni, S.R., 1986, *Astrophys. J.* **306**, L85,  
“Optical Identification of Binary Pulsars: Implications for Magnetic Field Decay in Neutron Stars”
- B3 Lyne, A.G., Brinklow, A., Middleditch, J., Kulkarni, S.R., Backer, D.C., and Clifton, T.R., 1987,  
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“The Discovery of a Millisecond Pulsar in the Globular Cluster M28”
- B4 Kulkarni, S.R. and Hester, J.J. 1988, *Nature* **335**, 801,  
“Discovery of a Nebula around PSR 1957+20”
- B5 Nakajima, T., Oppenheimer, B. R., Kulkarni, S. R., Golimowski, D. A., Matthews, K. & Durrance,  
S. T. 1995, *Nature* **378**, 463  
“Discovery of a cool, brown dwarf”
- B6 Metzger, M. R., Djorgovski, S. G., Kulkarni, S. R., Steidel, C. C., Adelberger, K. L., Frail, D. A.,  
Costa, E. & Frontera, F., 1997, *Nature* **387**, 878  
“The redshift of the optical counterpart to the gamma ray burst of 8 May 1997”
- B7 Frail, D. A., Kulkarni, S. R., Nicastro, L., Feroci, M. & Taylor, G. B. 1997, *Nature* **389**, 263  
“The radio afterglow from the gamma-ray burst of May 8, 1997”
- B8 Kulkarni, S. R., Frail, D. A., Wieringa, M. H., Ekers, R. D. Sadler, E. M., Wark, R. M., Higdon, J.  
L., Phinney, E. S. & Bloom, J. S. 1998  
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“The gamma-ray burst of 980425 and its association with the extraordinary radio emission from a  
most unusual supernova”
- B9 Bloom, J. S., Kulkarni, S. R., Djorgovski, S. G., Eichelberger, A. C., Cote, P. ed al. 1999  
*Nature* **401**, 453  
“The unusual afterglow of GRB 980326: evidence for the gamma-ray burst/supernova connection”
- B10 Frail, D. A., Kulkarni, S., Sari, R., Djorgovski, S. et al. 2001, *Astrophys. J.*, **562**, 55  
“Beaming in Gamma-Ray Bursts: Evidence for a Standard Energy Reservoir”

### Collaborators

C S. B. Anderson (Caltech), S. Ballmer, D. C. Backer (UCB), M. Bailes (Swinburn), C. Beichman (JPL),  
G. de Bruyn (Groningen), D. A. Frail (NRAO), D. Fox (PSU), C. Gelino, D. Golimowski (JHU), M.  
Ireland, N. Law, J. Lloyd, J. P. Macquart, E. Ofek, A. Rau, M. Shao (JPL), G. Taylor (NRAO), E.  
Waxman (Weismann), A. Wolszczan (PSU)

### Doctoral Advisees

D1 J. S. Bloom (UCB), E. Berger (OCIW), R. Danner (NGC), W. Deich(UCSC), B. F. Lane (MIT), B. A.  
Jacoby (NRL), D. Kaplan (MIT), H. M. Johnston (Australia), J. Navarro (industry), B. Oppenheimer  
(AMNH), P. Price (IfA), R. J. Rand (UNM), A. Soderberg (CIT), J. Sandhu (JPL), G. Vasisht (JPL)

### Post-doctoral advisees.

D2 A. Boccaletti (France), M. Britton (Caltech), J. C. Clemens (UNC), M. Creech-Eakman (JPL), A.  
Diercks (industry), C. Gelino (Caltech), E. Martin (Spain), D. Fox (PSU), T. J. Galama (industry),  
T. T. Hamilton (RAND), C. Haniff(Cambridge, UK), F. Jenet (JPL), V. Kaspi (McGill), C. Koresko  
(JPL), M. Konacki (Caltech), J. Lloyd (Caltech), D. S. Moon, J-L Margot (Cornell), T. Nakajima  
(Japan), M. Osorio-Zapatero (Spain), J. A. Phillips (USA), D. E. Reichart (UNC), R. Rutledge  
(McGill), S. E. Thorsett (UCSC), M. van Kerkwijk (U Toronto), X-P Pan (JPL)

E1 SRK' graduate advisor: C. Heiles, UCB

E2 SRK's post-graduate advisor: D. Backer, UCB