

## **CURRICULUM VITAE – Shrinivas R. Kulkarni (June, 2023)**

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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**

2017–            George Ellery Hale Professor of Astronomy & Planetary Sciences  
2006–2018      Director, Caltech Optical Observatories  
2004–2018      Director, NASA Extra-solar Planet Science Institute  
2001–2017      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  
  
2007–2013      A. D. White Professor-at-large, Cornell University  
2018–            Adjunct Professor, Raman Research Institute, India  
2020–            JRD Tata Chair Professor, Tata Institute of Fundamental Research, India

### **Current Research Interests**

Time Domain Surveys, UV missions, Radio Astronomical Methods  
Diffuse Interstellar medium  
Developing Graduate Level Astronomy Courses

### **Honors and Awards**

2016            Fellow, Royal Netherlands Academy of Arts & Sciences  
2015            Honorary Doctorate, Radboud University, Nijmegen, NL  
2011            Honorary Fellow, Indian Academy of Sciences  
2003            Member, National Academy of Sciences  
2001            Fellow, Royal Society, London  
1994            Fellow, American Academy of Arts and Sciences  
  
2024            Shaw Prize in Astronomy  
2018            Guggenheim Fellowship  
2017            Dan David Prize  
2005            Biermann Lecturer, Max Planck Institute for Astronomy  
2003            Salpeter Lecturer, Cornell Universities  
2002            Jansky Lecturer, Associated Universities, Inc.  
1996            Distinguished Alumni Award, Indian Institute of Technology, New Delhi  
1992            NSF Alan T. Waterman Prize  
1991            Helen B. Warner Prize, American Astronomical Society  
1990–1995      David and Lucille Packard Fellowship in Science and Engineering  
1990            Vainu Bappu Memorial Award, Astronomical Society of India  
1988–1993      NSF Presidential Young Investigator Award  
1988–1990      Alfred P. Sloan Research Fellow

1987 Henry G. Booker Fellow, International Union of Radio Science, USNC

### Personal Data

Nationality: U.S. & Overseas citizen of India

### Professional Services (selected and/or recent)

2009-present Chair, Physical Sciences Panel, Infosys Science Foundation  
2006–2018 Member of Board, California Association for Research in Astronomy  
2007–2016 Member of Board, Thirty Meter Telescope International Observatory  
2000–2010 Interdisciplinary Scientist, Space Interferometry Mission (SIM), NASA  
2001–2003 Chair, Chandra Users Group, NASA

**Mentoring:** I have had the pleasure of (co)supervising 32 students and 50 post-doctoral fellows. Please see my web page, <http://www.astro.caltech.edu/~srk>

**Teaching Experience:** I have taught graduate level courses in High Energy Astrophysics, Astronomical Instrumentation, Data Analysis and Signal Processing for Scientists, Stellar Astronomy and Interstellar Medium and specialized courses correlated to the launch of a mission or new discoveries (Very High Energy Astrophysics, Core Collapse Supernovae, Precision Photometry).

**Publications:** A current up to date list of refereed papers can be found at ADS (currently stands at 676 papers, 60,907 citations) and an h-index of 125. Below, I provide a list of key papers.

- B1 Backer, D.C., Kulkarni, S.R., Heiles, C.E., Davis, M.M., and Goss, W.M., 1982, *Nature* **300**, 615, “A Millisecond Pulsar”
- B2 Kulkarni, S.R., 1986, *Astrophysical Journal* **306**, L85, “Optical Identification of Binary Pulsars: Implications for Magnetic Field Decay in Neutron Stars”
- B3 Phinney, E. S. & Kulkarni, S. R. 1994, *Annual Review of Astronomy & Astrophysics*, **32**, 591, “Binary and Millisecond Pulsars”
- B4 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”
- B5 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, “Spectral constraints on the redshift of the optical counterpart to the  $\gamma$ -ray burst of 8 May 1997”
- B6 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”
- B7 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, *Nature* **395**, 663, “The gamma-ray burst of 980425 and its association with the extraordinary radio emission from a most unusual supernova”
- B8 Frail, D. A., Kulkarni, S., Sari, R., Djorgovski, S. et al. 2001, *Astrophysical Journal*, **562**, 55, “Beaming in Gamma-Ray Bursts: Evidence for a Standard Energy Reservoir”
- B9 Law, N. M. et al., 2009, *Publication of the Astronomical Society of the Pacific*, **121**, 1395, “The Palomar Transient Factory: System Overview, Performance and First Results”
- B10 Quimby, R., Kulkarni, S. R., Kasliwal, M. M., Gal-Yam, A. et al. 2011, *Nature*, **474**, 487, “Hydrogen-poor super luminous stellar explosions”
- B11 Cao, Y., Kulkarni, S. R., Howell, A. D., Gal-Yam, A. et al. 2015, *Nature*, **521**, 328, “A strong ultraviolet pulse from a newborn type Ia supernova”
- B12 Bellm, C., Kulkarni, S. R., Graham, M. J., Dekany, R. et al. 2019, *Publications of the Astronomical Society of the Pacific*, **131**, a8002B, “The Zwicky Transient Facility: System Overview, Performance, and First Results”
- B13 Bochenek, C. D., Ravi, V., Belov, K. V., Kocz, J., Kulkarni, S. R. & McKenna, D. L. 2020, *Nature*, **587**, 59, “A fast radio burst associated with a Galactic magnetar ”