# BIOGRAPHICAL SKETCH OF PI (Shardha Jogee)

### **Professional Preparation**

- Cambridge University, England Physics B.A. Honors (1992), M.A. (1995)
- Yale University, U.S.A Astronomy M. S. (1994), M. Phil. (1994), Ph.D. (1999)
- CalTech, U.S.A Astronomy Postdoctoral Scholar, Nov 1998 -June 2002

## **Appointments**

- Sep. 2004—Present: Assistant Professor (tenure-track), University of Texas at Austin
- July 2002-Sep. 2004: Astronomer (tenure-track), Space Telescope Science Institute

#### **Selected Publications**

- Jogee, S., Miller, S., Penner, K., Skelton, R. E., Conselice, C. J., Somerville, R. S., Bell, E. F., the GEMS collaboration, 2008, ApJ, submitted: 'History of Galaxy Interactions and Their Impact on Star Formation over the Last 7 Gyr from GEMS' [Submitted copy at www.as.utexas.edu/~sj/pt/interactions-sf-GEMS.2008.pdf]
- 2. Weinzirl, T., Jogee, S., Khochfar, S., Burkert, A., & Kormendy, J. 2008, ApJ, submitted (arXiv:0807.0040): 'Bulge n and B/T in High Mass Galaxies: Constraints on the Origin of Bulges in Hierarchical Models'
- 3. Jogee, S., Barazza, F., Rix, H.-W., Shlosman, I., Barden, M., Wolf, C. W., Davies, J., Heyer, I., Beckwith, S. V. W., Bell, E. F., et. al. 2004, ApJl, 615, L105: 'Bar Evolution Over the Last Eight Billion Years: A Constant Fraction of Strong Bars in GEMS'
- 4. Jogee, S., Scoville, N. Z., & Kenney, J. D. P. 2005, ApJ, 630: 'The Central Region of Barred Galaxies: Molecular Environment, Starbursts, and Secular Evolution'
- 5. Marinova, I., Jogee, S., et al., & the STAGES collaboration, 2008, ApJ, submitted: 'Barred Galakies in Dense Environments: Constraints from the Abell 901/902 supercluster with STAGES'
- 6. Heiderman, A., Jogee, S., et al., & the STAGES collaboration, 2008, ApJ, submitted: 'Frequency and Impact of Galaxy Interactions in the Abell 901/902 Supercluster with STAGES'
- 7. Marinova, I. & Jogee, S. 2007, ApJ, 659, 1176: 'Characterizing Bars at  $z \sim 0$  in the optical and NIR: Implications for the Evolution of Barred Disks with Redshift'
- 8. Jogee, S., 2004, in Lecture Notes in Physics, 'AGN Physics on All Scales', Eds. D. Alloin, R. Johnson, & P. Lira (Springer:Berlin Heidelberg New York), Chapter 6, in press (astro-ph/0408383): 'The Fueling and Evolution of AGN: Internal and External Triggers' (invited review chapter)
- 9. Jogee, S., Kenney, J. D. P., & Smith, B. J. 1999, ApJ, 526, 665 (astro-ph/9907085): 'A nuclear bar feeding molecular gas into a powerful central starburst in NGC 2782'
- Jogee, S., Shlosman, I., Laine, S., Englmaier, P., Scoville, N. Z., Knapen, J. H., & Wilson, C. D. 2002, ApJ, 575, 156 (astro-ph/0202270): 'Gas Dynamics in the Barred Spiral NGC 5248: Fueling a Circumnuclear Starburst Ring of Super Star Clusters'

<sup>&</sup>lt;sup>1</sup>We use 'et al.' here to indicate a very large authorship paper, and only list the two main authors who led the paper.

#### Synergistic Activities

- 1. Adviser for 72 Astronomy undergraduates and Advisor for Dean's Scholars UT Austin (May 2005–Present); Initiated a Freshman scholarship and mentorship program to support entering students in Astronomy (2006-2008); Co-I of STEM proposal (DUE-0807140) to help 1st/2nd year undergraduates achieve long term success in STEM fields, where women and minorities are under-represented (awarded \$600,000 by NSF in 2008). Initiated and developed a new course entitled 'Practical Introduction to Research in Astronomy' for 2008-09, to prepare undergraduates for research.
- 2. Led the US-based EPO program for the HST ACS Treasury Survey of the Coma cluster. Deliverables include 5 Stardate radio programs on the Coma cluster, which aired on May 5 to 9, 2008, to a weekly audience of over ten million people; the Universo Teacher's Guide for thousands of teachers nationally; and class activities focusing on galaxies in clusters.
- 3. Led an outreach program (funded by NSF and NASA) entitled 'Building a Bridge to Texas High School Science Teachers and Students' from 2006 to 2008. Used a UT Award for Instructional Innovation Techniques (2006) to push this effort further by developing the Galaxies and Cosmos Explorer Tool (GCET), an online tool (http://www.as.utexas.edu/gcet/) to students to actively engage in exploring the evolution of galaxies over a large fraction of the age of the Universe.
- 4. Member of Scientific Organizing Committee for (1) Conference on 'Galaxy Evolution: Emerging Insights and New Challenges', to be held at UT Austin in Nov. 2008; (2) Conference on Galaxy Dynamics along the Hubble sequence, to be held in Italy in Aug. 2008; (3) The 3rd North American ALMA Science Center Meeting, to be held in mid-2009.
- 5. Member of four large science collaborations (GEMS, STAGES, Coma ACS Treasury survey, and NICMOS-GOODS) where my research group and I are leading the papers on barred galaxies and some of the papers on the history and impact of galaxy interactions. Member of the home planning team for the *public* Hubble Ultra Deep Field (HUDF) in 2004.

#### Collaborators and Other Affiliations:

- Collaborators and co-editors F. Barazza (UT), D. Bacon (Portsmouth), M. Balogh (Waterloo), M. Barden (MPIA), E. Bell (MPIA), S. Beckwith (STScI), J. A. R. Caldwell (UT), D. Carter (Liverpool), C. Conselice (Nottingham), M. Dickinson (NOAO), H. Ferguson (STScI), M. Giavalisco (UMass), Gray M. E. (Nottingham), B. Häußler (Nottingham), C. Heymans (Edinburgh), K. Jahnke (MPIA), E. van Kampen (Innsbruck), J. Kenney (Yale), J. Knapen (Hertfordshire), S. Laine (CalTech/SIRTF), D. H. McIntosh (UMass), K. Meisenheimer (MPIA), B. Mobasher (STScI), C. Papovich (Arizona), C. Y. Peng (NRC-HIA), S. Ravindranath (STScI), H.-W. Rix (MPIA), I. Shlosman (Kentucky), R. Somerville (MPIA), N. Scoville (CalTech), A. Taylor (Edinburgh), L. Wisotzki (AIP), C. Wolf (Oxford), X. Zheng (PMO)
- Graduate and Postdoctoral advisers Jeff Kenney and Richard Larson (Yale University), Nick Scoville (CalTech)
- Thesis Adviser and postgraduate scholar sponsor Postdocs: Fabio Barazza (UT), Ingo Berentzen (Kentucky); Graduate students: Irina Marinova (UT), Amanda Heiderman (UT), Tim Weinzirl (UT); Undergraduate students at UT: Sarah. Miller, Kyle Penner, Steven Roloff, Kyle Lake, Elizabeth Hill-Aiello