

Andrea M. Ghez

Education:	California Institute of Technology, Ph.D., Physics	1992
	Massachusetts Institute of Technology, B.S., Physics	1987
Professional Appointments:	University of California Los Angeles	
	Head of Galactic Center Orbits Initiative	2014 - present
	Lauren B. Leichtman & Arthur E. Levine Chair	2009 - present
	Professor of Physics & Astronomy	2000 - present
	Associate Professor of Physics & Astronomy	1997 - 2000
	Assistant Professor of Physics & Astronomy	1994 - 1997
	Hubble Postdoctoral Research Fellow, University of Arizona	1992 - 1993
Major Awards & Honors:	Bakerian Medal, The Royal Society of London	2016
	Crafoord Prize in Astronomy, Royal Swedish Acad. of Sciences	2012
	California Institute of Technology Distinguished Alumni Award	2012
	American Philosophical Society, elected	2012
	MacArthur Fellowship	2008
	National Academy of Sciences, elected	2004
	American Academy of Arts & Sciences, elected	2004
	Raymond & Beverly Sackler Prize, University of Tel Aviv	2004
Recent Distinguished Lectures:	Pappalardo Lecture, MIT	2017
	Brickwedde Lecture, Johns Hopkins	2017
	Heilborn Lecture, Northwestern University	2017
	Ford Lecture, University of Michigan	2017
	Royal Swedish Academy of Sciences Annual Lecture, Sweden	2016
	Gruber Science Fellow Lecture, Yale	2016
	Welsh Lecture, University of Toronto, Canada	2016
	Angstrom Lecture, U. Uppsala /Royal Swedish Acad. of Science	2015
	Walter Stibbs Lecturer, University of Sydney, Australia	2015
	Giving Pledge, Learning Session at Simons Foundation	2015
	National Sci. Found. Distinguished Lecturer, Math & Phys. Sci.	2014
	Henry Primakoff Lectureship, University of Pennsylvania	2014
	McPherson Lectureship, McGill University	2013
	Brinson Lectureship, University of Chicago	2013
	John Bahcall Lectureship, Space Telescope Science Institute	2013
Current Service Activities:	W. M. Keck Observatory Science Steering Committee	2010 - present
	UC Observatory Advisory Committee	2012 - present
	TMT-International Science Definition Team, Black Holes	2013 - present
	Physical Sciences Diversity Committee	2015 - present
	W. M. Keck Observatory AO Science Council, Chair	2017
	Heising-Simons Physics & Astronomy Leadership Council	2017
	UCLA Vice Chancellor for Academic Personnel Search	2017
	UCLA Geffen Academy Working Group	2015 - present
	UCLA Physics & Astronomy Policy & Appointments Committee	2017

Research Group Members (current * & past: 80 total, 43 women, 7 underrepresented minorities):

Research Scientists & Project Scientists: Tuan Do*, Shoko Sakai*, Gunther Witzel*, Greg Martinez*, Leo Meyer **Postdocs:** Anna Ciurlo*, Aurelien Hees*, Gunther Witzel, Sylvana Yelda, Will Clarkson, Marshall Perrin, Nate McCrady, Leo Meyer, Joerge-Uwe Pott, Elise Furlan, Andrea Stolte, Samir Salim, Gaspard Duchene, Lisa Prato **PhD Graduate Students:** Abhimat Gautam*, Devin Chu*, Samantha Chappell*, Breann Sitarski, Sylvana Yela, Tuan Do, Quinn Konopacky, Jessica Lu, Seth Hornstein, Caer McCabe, Angelle Tanner, Jennifer Patience, Russel White; Sam Chappell **MS Graduate Students:** Kelly O’Neal*, Zhuo Chen*, Anna Boehle, Kim Phifer, Marc Rafelski, Shelley Wright, Suvi Gezari, Mike Berkovitch, Beth Klein **Post-Bac & -MS, Undergraduate & High School Students:** John Mangian, Arezu Dehghanfar & 46 former

Selected Publications (134 refereed papers since 1991 with >10,000 citations):

1. Chu, D. S., Do, T., Hees, A., Ghez, A. et al. 2017 “Investigating the Binariness of S0-2: Implications for its Origins and Robustness as a Probe of the Laws of Gravity around a Supermassive Black Hole,” ApJ, accepted arXiv:1709.04890
2. Hees, A., Do, T., Ghez, A. M. et al. 2017 “Testing General Relativity with Stellar Orbits around the Supermassive Black Hole in Our Galactic Center,” Physical Review Letters, 118, 211101
3. Boehle, A., Ghez, A. M., Schödel, R., Meyer, L., Yelda, S., Albers, S., Becklin, E. E., Do, T., Lu, J. R., Martinez, G. D., Matthews, K., Morris, M., Sitarski, B., Witzel, G., 2016 “An Improved Distance and Mass Estimate for Sgr A* from a Multi-Star Orbital Analysis,” ApJ, 830, 17
4. Ghez, A. M., Salim, S., Weinberg, N. N., et al. 2008, “Measuring Distance and Properties of the Milky Way’s Central Supermassive Black Hole with Stellar Orbits,” ApJ, 689, 1044
5. Ghez, A. M., Salim, S., Hornstein, S. D., Tanner, A., Morris, M., Becklin, E. E., Duchêne, G. 2005, “Stellar Orbits Around the Galactic Center Black Hole,” ApJ, 620, 744
6. Ghez, A. M., Hornstein, S. D., Lu, J. R., et al. 2005, “The First Laser Guide Star Adaptive Optics Observations of the Galactic Center: Sgr A*’s Infrared Color and the Extended Red Emission in its Vicinity,” ApJ, 635, 1087
7. Ghez, A. M., Wright, S. A., Matthews, K., et al. 2004, “Variable Infrared Emission from the Supermassive Black Hole at the Center of the Milky Way,” ApJ, 601, L159
8. Ghez, A. M., Duchêne, G., Matthews, K., et al. 2003 “The First Measurement of Spectral Lines in a Short-Period Star Bound to the Galaxy’s Central Black Hole: A Paradox of Youth,” ApJ, 586, L127
9. Ghez, A. M., Morris, M., Becklin, E. E., Kremenek, T., and Tanner, A. 2000, “The Accelerations of Stars Orbiting the Milky Way’s Central Black Hole,” Nature, 407, 349
10. Ghez, A. M., Klein, B. L., Morris, M., & Becklin, E. 1998, “High Proper Motion Stars in the Vicinity of Sgr A*: Evidence for a Supermassive Black Hole at the Center of Our Galaxy,” ApJ, 509, 678

Selected Public Outreach Activities:

- **Documentaries:** IMAX, “Einstein’s Incredible Universe” (Daniel Ferguson), filming began 2017, release date 2019; NOVA, “Black Hole Apocalypse” (Rush DeNooyer), Jan 2018; & >30 others
- **Museum Exhibits:** materials for >10 shows, including National Academy Science Keck Building Lobby, Adler Planetarium, Denver Museum, Smithsonian Astrophysical Observatory traveling museum exhibition about black holes
- **Public Talks:** >100 given, including TED Global 2009, which gets significant, online viewership
- **Textbooks:** Content for >30 educational textbooks ranging from high-school to advanced graduate

level