

Charles F. Gammie

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Education

Princeton University, September, 1987—December, 1991
Ph.D. in Astrophysical Sciences, June, 1992. Thesis: “The Formation of Giant Molecular Clouds.” Advisor: Jeremy Goodman. Princeton-Von Neumann Supercomputing Award.

Yale University, September, 1983—June, 1987
B.Sc. in Mathematics, June, 1987. Senior Thesis: “Stability of Spherically Symmetric Accretion onto a Schwarzschild Black Hole.” Advisor: Vincent Moncrief. Beckwith Prize in Astronomy, DeForest Prize in Mathematics.

Positions Held

August, 2005—: Professor, Astronomy Department and Physics Department, University of Illinois at Urbana-Champaign.

August, 2004—August, 2005: Associate Professor, Astronomy Department and Physics Department, University of Illinois at Urbana-Champaign.

January, 1999—August, 2004: Assistant Professor, Astronomy Department and Physics Department, University of Illinois at Urbana-Champaign.

September, 1998—December, 1998: Research Associate, Radio and Geoastronomy Division, Smithsonian Astrophysical Observatory.

September, 1994—August 1998: postdoctoral fellow with Ramesh Narayan, Theoretical Astrophysics Division, Harvard-Smithsonian Center for Astrophysics.

January—June 1998: Rosenbaum Fellow, Program on Dynamics of Astrophysical Discs, Isaac Newton Institute, University of Cambridge (on leave from Center for Astrophysics).

April—June 1997: postdoctoral fellow, Institute of Astronomy, University of Cambridge (on leave from Center for Astrophysics).

January, 1992—August, 1994: Virginia Institute for Theoretical Astronomy Postdoctoral Fellow, Astronomy Department, University of Virginia.

June—August, 1988 and 1989: consultant, Radio Physics Group, Crawford Hill, Bell Laboratories.

Awards and Activities

University Scholar, University of Illinois, Sept. 2007—Aug. 2010.

Richard and Margaret Romano Professorial Scholar, Oct. 2007—Oct. 2010.

Member, Institute for Advanced Study, Sept. 2006—June 2007.

Fellow of the American Physical Society, 2006.

Sony Faculty Fellow, Sept. 2005—Aug. 2008.

Coordinator for Kavli Institute for Theoretical Physics program on “Jets and Accretion Disks,” Apr. 2005—July 2005, University of California, Santa Barbara, with Henk Spruit and Omer Blaes.

Beckman Fellow, 2002—2003, Center for Advanced Study, University of Illinois at Urbana-Champaign.

Presidential Early Career Award for Scientists and Engineers, July 2002. The “*highest honor bestowed by the United States Government on scientists and engineers beginning their independent careers.*”

National Center for Supercomputing Applications, Faculty Fellow, 2001-2002, University of Illinois at Urbana-Champaign.

Current Grants

NASA Astrophysics Theory Program, “Simulations of Pair Production in Jets,” Principal Investigator: Gammie. Amount: \$253,033. Duration: Jan. 2011-2014.

National Science Foundation Astronomy Program, “Precision Bothrology,” Principal Investigator: Gammie. Amount: \$725,721. Duration: Sept. 2007-2011.

Teragrid Allocation. “Numerical Studies of Accretion Disks,” Principal Investigator: Gammie. Amount: 2.2 M Hr. Duration: Jan. 2010-2011.

Recent Invited Talks

Frontiers in Computational Astrophysics: Particles and Flames in Magnetic and Radiative Flows, ENS Lyon (Oct. '10), American Astronomical Society, Miami, FL (May '10), Astrophysics Colloquium, Northwestern University (Feb. '10), Physics Colloquium, Purdue University (Feb. '10), Princeton Center for Theoretical Science, Computational Relativistic Astrophysics program (Jan. '10), Center for Astrophysics Institute for Theory and Computational colloquium (Dec. '09), Galactic Center 2009 meeting, Shanghai, China (Oct. '09), Isaac Newton Institute, Dynamics of Discs and Planets Conference, Cambridge,

UK (Aug '09), American Physical Society, April meeting, Denver, CO (May '09), American Astronomical Society, Jan. meeting, Long Beach, CA (May '09), Kavli Institute for Astronomy and Astrophysics, Disk workshop (Nov. '08), University of British Columbia astrophysics seminar (Sept. '08), Institute for Advanced Study, MRI workshop (June '08), New York University, physics colloquium (March '08), University of Victoria/Hertzberg Institute of Astrophysics colloquium (February '08), IUCAA conference on Measuring Spin and Mass of Black Holes, Pune, India (Dec. '07), NRAO colloquium, Socorro, NM (Sept. '07), Gordon conference on the Origin of the Solar System, Mt. Holyoke College (July '07), Institute for Advanced Study astrophysics colloquium (April '07), TIARA workshop on Accretion and Outflows in AGNs, Tsing Hua Univ., Hsinchu, Taiwan (Nov. '06), Center for Astrophysics, Institute for Theory and Computation seminar (Oct. '06), MIT workshop on magnetized disks (Oct. '06), Columbia University, astronomy colloquium (Sept. '06), Conference on Computational Physics 2006, Geongju, Korea (Aug. '06), University of Michigan, astronomy seminar (June '06), University of California, Santa Cruz astronomy colloquium (Jan. '06),

Professional Societies

American Astronomical Society

American Physical Society

American Geophysical Union

American Association for the Advancement of Science

Student and Postdoctoral Fellow Supervision

Current Undergraduate Research Students: Yi Chen Hu, Jan '09– present. Ben Montet, Jan '09– present.

Former Undergraduate Research Students: Keith Obenschain, Fall '99, went on to Naval Research Lab; John Zuhone, Summer '00, went on to astrophysics graduate program at the University of Chicago; J. Scott Olsson, Summer '00, Summer '01, senior thesis, went on to computational science graduate program at the University of Maryland; Geert Vrijsen, Summer '01, went on to physics graduate program at Stanford University; Ian Morrison, Summer '03, went on to physics graduate program at UC Santa Barbara; Jonathan Seale, Spring '04, went on to astronomy graduate program at Illinois; Charles Hansen, Summer '02– Spring '04, went on to astronomy graduate program at UC Berkeley; Jacob Simon, Summer '02– Spring '04, now in astronomy graduate program at University of Virginia; Conley Ditsworth, Summer '02– Summer '04; Laura Book, Spring '04– Spring '07, now in physics graduate program at Caltech. Ben Vega-Westhoff, Fall '07– Jan. '09. Maximo Menchaca, Spring '08– Jan. '09.

Current Graduate Research Students: Po-Kin Leung, Astronomy, Summer '03– present; Joshua Dolence, Astronomy, Fall '07– present; Hotaka Shiokawa, Astronomy, Fall '07– present.

Former Graduate Research Students: Eric Engelhard, Physics, academic year '01–'02; Yen-Ting Lin, Astronomy, academic year '01–'02; Wen-Ching Lin, Astronomy, Summer and Fall '99; Tridivesh Jena, Physics, academic year '00–'01; Jacqueline Vasconcelos, visiting student from Sao Paolo, Brasil, academic year '00–'01. Jonathan McKinney, Physics, supported by NASA Graduate Student Research Program fellowship, Ph.D. Summer '04, now at Stanford University as a Chandra fellow; Bryan Johnson, Physics, Ph.D. Summer '05, now at Lawrence Livermore National Laboratory. Xiaoyue Guan, Astronomy, Ph.D. Summer '09, now at University of Virginia.

Current Postdoctoral Fellows: Monika Moscibrocza, Aug '08—.

Former Postdoctoral Fellows: Ruben Krasnopolsky, Oct. '02—Aug. '05. Now at Taipei; Scott Noble, Sept. '03—Aug. '06. Now at Rochester Institute of Technology as a postdoctoral fellow.