

Francis P. Wilkin

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Positions

Postdoctoral Fellow, Instituto de Astronomía, UNAM, Mexico, Feb 2002-2004
Poincaré Postdoc, Observatoire de la Côte d'Azur, France, 2001
JPL Postdoc, IPAC, California Institute of Technology, Jan 1999-Jan 2001
NRC Postdoc, NASA Ames Research Center, Jan 1998 - Dec 1998

Education

Ph.D. 12/1997 Astronomy University of California, Berkeley
Research Advisor: Dr. S. Stahler Dissertation Chair: Prof. C. McKee
M.A. 1991 Astronomy University of California, Berkeley
B.S. 1989 Astronomy University of Massachusetts, Amherst
B.S. 1989 Physics University of Massachusetts, Amherst
A.A. 1986 Math/Science Mattatuck Community College (hereafter, MCC)

Awards and Honors (partial list)

NSF International Research Fellowship 6/2002-5/2004
Henri Poincaré Fellowship, Observatoire de la Côte d'Azur, 2001
National Research Council Associateship, NASA/Ames, 1998
Outstanding Graduate Student Instructor Award, UC Berkeley, 1997
AAS Division for Dynamical Astronomy Student Stipend Award, 1997
Josephine de Kármán Fellowship 1996-1997
NASA Graduate Student Researchers Program Fellowship 1993-1996
Commonwealth Scholar, UMass, 1989
Summa cum laude (Astronomy degree), UMass, 1989
Cum laude (Physics degree), UMass, 1989
Departmental Honors, Five College Astronomy Department, 1989
Phi Beta Kappa and Phi Theta Kappa
Five College Astronomy Research Fellowship, Summer 1988
Visiting Research Assistantship, National Radio Astronomy Observatory, 1987
Summa cum laude, MCC, 1986
Who's Who in American Junior Colleges, 1986
Randy E. Bergin Mathematics Award, MCC, 1986
Faculty Award for Physical Science, MCC, 1986

Research Interests

- * Extrasolar Planet Detection
- * Star Formation Theory, Protostellar Jets, Outflows and Disks
- * Radio and Optical Interferometry
- * Hydrodynamics, Magnetohydrodynamics, Bow Shocks and Colliding Winds

Talks Given (partial list)

- Interferometría Infrarroja de Estrellas Jóvenes
Nov 14, Universidad de Guanajuato, México
Nov 6, VII Congreso Regional, Morelia, México
- La interacción de vientos protoestelares con el ambiente de acreción (in Spanish)
Sep 10, 2003, Instituto de Astronomía, UNAM, Mexico City, México
Jun 6, 2003, Universidad de Guanajuato, México
May 23, 2003, XVII Congreso Nacional, México (Invited talk)
April 11, 2002, Instituto de Astronomía, Morelia, México
- The Breakout of Protostellar Winds in the Infalling Environment
Oct 22, 2002 Instituto de Astronomía, Ensenada, México.
May 18, 2002 Budapest, Hungría
- Interaction of Protostellar Winds with their Environment
Sept 10, 2002 Pátzcuaro, México
- Trapped Protostellar Winds and the Breakout Time
Sept 3, 2002 Porto, Portugal
Jun 17, 2002 Taipei, Taiwan
- The Interaction of Protostellar Winds With the Infall Environment,
Feb 18, 2002 Observatorio Astronómico Nacional, Alcalá de Henares, Spain
- L'interaction des vents protostellaires avec la matière en effondrement (in French),
Feb 20, 2002, Laboratoire d'Astrophysique, Nice, France
Feb 15, 2002, Observatoire de la Cote d'Azur, Grasse, France
Feb 12, 2002, École Normale Supérieure, Paris, France
Feb 5, 2002, Observatoire de Nice, France
Nov 29, 2001, Centre d'Études Atomiques de Saclay, Paris, France
- Dynamical Models of Protostellar Wind Breakout,
May 29, 2000, Arcetri, Florence, Italy
April 21, 2000, NASA Ames Research Center, California
March 30, 2000, California Institute of Technology

Teaching Experience

5 Semesters as Graduate Student Instructor¹ at UC Berkeley
Head Graduate Student Instructor², Introductory Astronomy, Spring 1997
Introduction to Astronomy and Astrophysics (for Astronomy majors), Fall 1996
Introductory Astronomy (for non-science majors), Fall 1995, Fall 1989
General Astronomy (for math and science majors), Spring 1990
Chemistry Tutor, 9/85-5/86, MCC

¹ Duties: Gave discussion, review, stargazing sessions and fieldtrips, guest lectures

² Duties as above; manage grade database for 500 students, run exam sessions, supervise team of 7 GSIs and 5 readers, edit homework solutions

Community Service and Astronomy Popularization

Referee, Astrophysical Journal, Revista Mex. de Astronomía y Astrofísica

Public lectures “Planetas de otras estrellas”

Nov 21, Conferencia de Ciencia y Arte, Morelia, México (Invited talk)

Nov 13, Guanajuato, México

Gave lecture and computer workshop in the 5th Summer School in Astrophysics

Optical and Infrared Interferometry and the Search for Extrasolar Planets; and

Astrometric Detection of Extrasolar Planets: Periodogram Analysis and Least Squares (in Spanish), Aug 12,13 at CRyA, UNAM Morelia, México

Radio interview “El Eclipse Lunar Total del 16 de Mayo, 2003”

Radio Nicolaita, May 15, 2003, Morelia, México

Public talks in “Ciencia para niños y sus papas,” (Science for children and their parents)

Morelia Planetarium, Morelia, Michoacán, México:

May 24, 2003 “La Muerte de las Estrellas” (The Death of the Stars)

June 1, 2002 “Planetas en otras Estrellas” (Planets of Other Stars)

Public talk: Stars, their Birth, Life and Death (in Spanish), Escuela de Ingeniería Eléctrica,

Universidad Michoacana de San Nicolás Hidalgo, Morelia, 28 de Marzo, 2003

Presentations in the Science Exhibition “el Tianguis de Ciencia”, Universidad Michoacana de San Nicolás de Hidalgo, Morelia

The Birth of the Stars, 4-5 April 2003

Colors of the Stars, 19 April, 2002

Viewing Sunspots by Eyepiece Projection, 19 April, 2002

Directed observing session of planets at primary school “Niños Heroes”, with over 120 students, Morelia, Michoacán, 25 Abril, 2002

Conducted dozens of star parties, 1989-1997, University of California, Berkeley

Wilkin, Francis P.

Community Service and Astronomy Popularization, cont.

Wrote proposal with Prof. Filippenko to remodel the Berkeley Astronomy Department rooftop observatory with new 16" reflecting telescope and CCD for teaching and undergraduate research use, 9/96. Project completed Fall 1998.

Observatory Assistant, Mattatuck Community Observatory (MCO), 9/85-5/86

Conducted public observing sessions, by which over 2,500 laypersons viewed Halley's Comet Participation in Catalogue, on public television in Connecticut, featuring the Mattatuck Community Observatory, 1986

Interferometry Workshops and Summer Schools Attended

Michelson Interferometry Summer School, 1999, 2000, 2001

Physics of Star Formation and Early Stellar Evolution, May 1998, Greece

VLA Synthesis Imaging Summer School, June 1995, Socorro, NM

BIMA Interferometry Summer School, July 1994, Hat Creek, CA

Languages

French, Spanish: Fluent speaking, reading and writing ability

References: Research

Dr. David Hollenbach, NASA Ames Research Center, MS 245-3,
Moffett Field, CA 94035-1000 USA hollenbach@ism.arc.nasa.gov
Phone: 1-(650)-604-4164
FAX: 1-(650)-604-6779

Dr. Susana Lizano, Centro de Radioastronomía y Astrofísica,
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References: Teaching

Prof. Alex Filippenko, Astronomy Dept,
University of California, Berkeley, CA 94720
Phone: (510)-642-1813; alex@astro.berkeley.edu