

SUBHANJOY MOHANTY

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PROFESSIONAL PREPARATION

UNDERGRADUATE, GRADUATE, POSTDOCTORAL & FACULTY

Harvard University
Degree: B.A. in Astronomy, 1995 (A. Goodman, advisor)

University of California at Berkeley
Degree: Ph.D. in Astronomy & Astrophysics, 2002
Thesis: *Ultra-Cool Dwarfs: Atmospheres, Magnetic Activity & Rotation* (G. Basri, advisor)

Harvard University
Space Interferometry Mission (SIM) Postdoctoral Fellow, 2002 – 05
Area: *Characterization of Accretion, Rotation and Variability of T Tauri Stars for SIM Key Project*

Harvard University
Spitzer Postdoctoral Fellow, 2005 – 2008
Area: *Formation, Accretion, Disks and Evolution in Brown Dwarfs*

Imperial College London
Faculty (Lecturer), Astrophysics Group, Department of Physics, Fall 2008 – Present

FELLOWSHIPS, GRANTS & KEY PROJECTS

P.I., JCMT SCUBA-2 Shared Risk Observing: 2009 (*Can Earth-mass Planets Form around Brown Dwarfs?*)
Member, JCMT SCUBA-2 “Unbiased Nearby Stars Survey” (SUNSS) Key Project (350 hrs): 2009 – 2011
Member, Herschel Space Observatory ATLAS Key Project (600 hours): 2009 – ongoing
Member, CFHT “Magnetic Protostars & Planets” (MaPP) Large Program (690 hours): 2009 – 2012
Affiliate, Spitzer Legacy GTO team on “Cores to Disks” (*c2d*, P.I.: Neal Evans)
Spitzer Cycle-3 General Observer (P.I.) Grant: 2006 – 07
National Science Foundation Grant: 2006 – 07
(K. Stassun, S. Mohanty, G. Doppman: *A Fundamental Calibration of PMS Models for Brown Dwarfs*)
NASA Origins Grant: 2006 – 09
(J. Gizis, S. Mohanty, R. Jayawardhana: *Observations of a Brown Dwarf Planetary System*)
Spitzer Postdoctoral Fellowship: 2005 – 08
Spitzer Cycle-2 General Observer (P.I.) Grant: 2005 – 06
Space Interferometry Mission Postdoctoral Fellowship: 2002 – 05
Center for Integrative Planetary Studies Research Grant, UC Berkeley: 2001 – 02
Research and Teaching Assistantships, UC Berkeley: 1997 – 2002
Mount Wilson Observatory Research Fellowship: 1996 – 97
Research Associate, Center for Adaptive Optics, University of Arizona: 1995 – 97
Radcliffe Fellowship for AIDS Outreach in India, Harvard University: Summer 1994

SYNERGISTIC ACTIVITIES

ESO Proposal Review Panel, Periods 85 & 86: 2009 – 2010
Chandra Proposal Review Panel: 2009
Science & Technology Funding Council (STFC UK) Reviewer for Postdoctoral Fellowships: 2008
NSF Proposal Review Panel: 2007
HST Proposal Review Panel, Cycle 16: 2007
Spitzer Proposal Review Panel, Cycle GO-2: 2005
Co-Organizer, session on Formation & Evolution of Brown Dwarfs, in *Cool Stars & The Sun XIII*: 2004
Organizer, weekly Journal Club on Star Formation, Harvard CfA: 2003 – 05
Manuscript referee for *Astrophysical Journal*, *Astronomical Journal*, *Astronomy & Astrophysics*
Science writing (*Scientific American*, 2005; co-author of astronomy reference book, 2010: see publications list)

INVITED TALKS – RESEARCH

IAU General Assembly XXVII, Rio, 2009 (*review talk: Accretion and Outflow – Theory versus Observations*)
University of St. Andrews (UK), 2009 (*colloquium*)
University of Leeds (UK), 2009 (*colloquium*)
University of Exeter (UK), 2009 (*colloquium*)
Garching (Germany), 2009 (*conference on 'From Circumstellar Disks to Planetary Systems'*)
Shanghai, 2009 (*conference on 'New Technologies for Probing the Diversity of Brown Dwarfs & Exoplanets'*)
Rhodes (Greece), 2008 (*conference on 'Protostellar Jets in Context'*)
Cozumel (Mexico), 2008 (*conference on 'Magnetic Fields in the Universe'*)
Chamonix (France), 2007 (*conference on 'Structure Formation in the Universe'*)
IAUS243 ('*Star-Disk Interaction*'), Grenoble (France), 2007 (*review talk: Accretion in Brown Dwarfs*)
University of São Paulo (Brazil), 2006 (*colloquium*)
IAU General Assembly XXVI, Prague, 2006 (*review talk: Convection in Brown Dwarfs*)
Cool Stars, Stellar Systems and the Sun XIV, Pasadena, 2006 (*review talk: Accretion in Brown Dwarfs*)
AAS Calgary, 2006 (*press conference*)
Cambridge (UK), 2006 (*conference on 'The Planet-Disk Connection'*)
Porto (Portugal), 2006 (*conference on 'Physical Processes in Circumstellar Disks'*)
University of Toronto, 2006 (*colloquium*)
American Museum of Natural History, Astrophysics Department, 2006 (*seminar*)
University of California at Santa Cruz, 2006 (*colloquium*)
Academia Sinica Institute of Astronomy & Astrophysics (Taiwan), 2005 (*star formation workshop*)
Massachusetts Institute of Technology, 2005 (*colloquium*)
University of California at Berkeley, 2004 (*colloquium*)
University of California at Los Angeles, 2004 (*colloquium*)
Carnegie Observatories, Pasadena, 2004 (*colloquium*)
Department of Terrestrial Magnetism, Carnegie Institution of Washington, D.C., 2004 (*colloquium*)
California Institute of Technology, 2004 (*seminar*)
University of Delaware, 2004 (*seminar*)
Max-Planck-Institut für Astronomie, Heidelberg (Germany), 2004 (*seminar*)
Volterra (Italy), 2004 (*conference on 'Low Mass Stars & Brown Dwarfs: IMF, Accretion & Activity'*)
Hamburg (Germany), 2004 (*XIIIth Cambridge Workshop on 'Cool Stars, Stellar Systems & The Sun'*)
IAU General Assembly XXV, Sydney, 2003 ('*Frontiers of High-Resolution Spectroscopy*' session)
Ouro Preto (Brazil), 2003 (*conference on 'Open Issues in Local Star Formation & Early Stellar Evolution'*)

RESEARCH INTERESTS

Formation of low-mass stars, brown dwarfs and planets: accretion, ejection, multiplicity, disk properties
Magnetospheric accretion: MHD modeling of classical T Tauri stars
Imaging and spectroscopy of disks, jets and faint companions with AO and coronagraphs
Extra-solar planets and debris disks around low-mass stars and brown dwarfs

Structure and physical properties of low-mass stars and brown dwarfs: temperature, gravity and evolution
Atmospheres of low-mass stars and brown dwarfs: dust formation, clouds and 'weather'
Magnetic activity and angular momentum evolution in low-mass stars and brown dwarfs

RESEARCH TOOLS

Optical, infrared and sub-mm/mm spectroscopy, photometry and adaptive optics imaging
(Herschel, Spitzer, JCMT-SCUBA2, Keck, VLT, Magellan, Subaru, MMT, CTIO)
MHD numerical simulations and theory

COLLABORATORS

G. Basri (UC Berkeley), F. Shu (UC San Diego), R. Jayawardhana (U. of Toronto, Canada), A. Goodman (Harvard CfA), K. Stassun (Vanderbilt U.), J. Greaves (U. of St. Andrews, UK), B. Ercolano (U. of Exeter, UK), J. Gizis (U of Delaware), G. Chabrier (ENS Lyon, France), I. Baraffe (ENS Lyon, France), F. Allard (ENS Lyon, France), P. Hauschildt (Hamburg Sterwarte, Germany), A. Natta (INAF, Italy), J. Bouvier (LAOG, France), D. Barrado y Navascués (LAEFF, Spain), M. Tamura (NAOJ, Japan)