

### Amaya Moro-Martín

### **Curriculum Vitae**

Space Telescope Science Institute 3700 San Martin Dr, MD 21218 Baltimore, US amaya@stsci.edu (410) 338 2488

## **Current Positions**

#### Space Telescope Science Institute - since Jan 2014

Assistant Astronomer (AURA)

#### The Johns Hopkins University - since Sep 2014

Associate Research Scientist, Department of Physics and Astronomy

#### Research Lines

Circumstellar disks; solar & extra-solar planetary systems; interplanetary dust; dynamical simulations; infrared observations; science policy

#### Education

#### Ph.D., Astronomy; University of Arizona — 2004

"Signatures of Planets in Circumstellar Debris Disks".

Directed by Renu Malhotra.

#### M.Sc., Astronomy; University of Arizona — 2000

"Infrared and Millimetric Study of the Young Outflow Cep E".

Directed by A. Noriega-Crespo.

#### B.Sc. (Licenciatura), Physics; Universidad Complutense de Madrid (Spain) - 1998

Five-year program. Specialty: Fundamental Physics.

## **Previous Positions**

#### Spanish National Research Council, Centro de Astrobiología — Oct 2008-Jan 2014

Ramón y Cajal Fellow (tenure-track)

#### Princeton University, Department of Astrophysical Sciences — Dec 2004-June 2014

Visiting Research Collaborator — Oct 2008-Jun 2014

Associate Research Scholar — Oct 2007-Oct 2008

Postdoctoral Research Associate — Dec 2004-Oct 2007

Michelson Fellow — Sep 2005-Oct 2008

Lyman Spitzer Fellow — Dec 2004-Oct 2008

#### Max Plank Institute fur Astronomie, Heidelberg, Germany - Sep 2004-Dec 2004

Postdoctoral Researcher

#### University of Arizona, Astronomy Department — Oct 1998-Aug 2004

Research Assistant — May 2001-Aug 2004 and May 1999-Aug 2000

Teaching Assistant — Aug 2000-May 2001

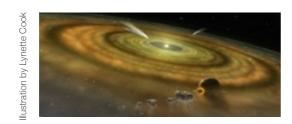
College of Science Fellow — Oct 1998-May 1999

#### Maria Mitchel Observatory, Nantucket — Summers 1995 and 1996

Intern at the Research Experience for Undergraduate Program

#### Univ. of Colorado, Center for Astrophysics & Space Astronomy — Oct 1994-Jun 1995

Student Laboratory Assistant



# Amaya Moro-Martín Curriculum Vitae

## Fellowships & Awards

Visiting Fellow; Isaac Newton Institute for Mathematical Sciences — 2009 University of Cambridge (UK).

Ramón y Cajal Fellowship; Consejo Superior de Investigaciones Científicas — 2007 Ministerio de Ciencia e Innovación (Spain).

**Michelson Fellowship, Michelson Science Center, Caltech — 2005** (brought to Princeton University).

Lyman Spitzer Fellowship, Princeton University — 2004

Department of Astrophysical Sciences.

Gerad P. Kuiper Memorial Award; University of Arizona — 2004

Department of Planetary Sciences.

College of Science Fellowship; University of Arizona — 1998

Department of Astronomy.

#### **Scholarships**

#### Perkins Scholarship; Maria Mitchell Observatory — 1995

Research Experience for Undergraduate Program, Nantucket.

ISEP Scholarship; Universidad Complutense de Madrid (Spain) — 1994

International Student Exchange Program Scholarship to spend one year at UC Boulder.

## Peer Review Activities

#### Journals and Books (as referee)

Astronomy & Astrophysics

Astrophysical Journal

Celestial Mechanics and Dynamical Astronomy

Earth, Planets and Space

Ethics in Science and Environmental Politics

Journal of Physics

University of Arizona Press

Science

#### **Funding Agencies (as reviewer)**

Netherlands Organization for Scientific Research (NWO) - Veni grants (2015)

NASA Exoplanet Research Program (2014; panelist)

NASA Planetary Geology and Geophysics (2011; external reviewer)

NASA Planetary Geology and Geophysics (2010; external reviewer)

NSF Stellar Astronomy & Astrophysics Program (2008; panelist)

NASA Outer Planets Research Program (2008; panelist)

NASA Planetary Geology and Geophysics (2008; external reviewer)

NASA Origins Program (2007; external reviewer)

NASA Outer Planets Research Program (2006; external reviewer)

#### **Time Allocation Committee**

Keck Interferometer (2008; panelist)



# Amaya Moro-Martín Curriculum Vitae

#### Other

Giaconni Fellowship (STSCI) - 2015

## **Conference Organization**

International Astronomical Union Symposium 299: Exploring the formation and evolution of planetary systems — Victoria, Canada, June 2014.

Role: SOC

European Planetary Science Congress and Division of Planetary Science Joint Meeting 2011. Session E06 "Exoplanets and Origins: Debris disks". Nantes, France, Oct 2011.

Role: Convener.

## Teaching Experience

Cátedra José Celestino Mutis; Universidad Nacional de Colombia — Oct 2009

Attendance: approx. 1500 people, Bogota, Colombia.

(activities with university credits)

Summer course; Universidad Autónoma de Madrid, Spain — Aug 2008

"Planetary systems beyond the Sun. Attendance: approx. 30 people.

Teaching Assistant; University of Arizona — 2000-2001

Natural Sciences 102 "The Physical Universe", Astronomy Department.

#### Science Policy

Member of governing board of Euroscience — since Nov. 2012

http://www.euroscience.org/

Member of governing board of the Royal Spanish Society for Physics — since 2011

http://www.rsef.org

Founder and spokesperson of Investigación Digna — since 2010

Science advocacy grassroots

http://www.investigaciondigna.es

#### Outreach

Spanish Spitzer Science Center Outreach Program — 2001-2003

Principal editor; Spitzer Science Center, Caltech

http://legacy.spitzer.caltech.edu/espanol/spanishcredits.shtml

#### Participation in Large Research Programs

Spitzer-FEPS Legacy program "Formation and Evolution of Planetary Systems"

co-l (P.I.: Michael Meyer) — 2001-2008

<u>Description</u>: Survey of 349 hours from 3 to 160  $\mu$ m for the search and characterization of debris disks around 300 FGK stars (0.7–1.5  $M_{Sun}$ ) with ages between 3 Myr and 3 Gyr.

Herschel-DEBRIS Key Program "Disc Emission via a Bias-free Reconnaissance in the Infrared/Sub-millimetre" co-l (P.I.: Brenda Matthews) — since 2007

<u>Description</u>: Survey of 140 hours from 100 and 160  $\mu$ m (with follow-up at 250, 350 and 500  $\mu$ m) for the search and characterization of debris disks around 446 nearby AFGKM stars.

Subaru-SEEDS "Subaru Strategic Exploration of Exoplanets and Disks with HiCIAO/



# Amaya Moro-Martín Curriculum Vitae

**AO188"** co-l (P.I.: Motohide Tamura) — since 2007

<u>Description</u>: 120 nights with Subaru to observe 500 stars from 1 Myr to 1 Gyr to detect extrasolar planets with masses between 1-13 M<sub>Jup</sub> and study circumstellar disks.

HST Debris Disks's GO Programs 12228 and 13786 (co-l; P.I.: G. Schneider)

<u>Description</u>: 88 and 40 orbits awarded in Cycles 18 and 22, respectively, to use the STIS coronograph for the observation of debris disks previously detected by NICMOS.

**JCMT-SCUBA2 SONS** ("SCUBA-2 Observations of Nearby Stars", P.I.'s: B. Matthews, J. Greaves, W. Holland).

<u>Description</u>: surveying 115 nearby stars at 850 µm known to harbor debris disks, with the goals of constraining the total dust mass, disk outer radius and particle size, and stuyding the disk evolution and disk structure, allowing to identify interesting targets for *ALMA*.

## Colloquia & Seminars

12.2014: Department of Physics and Astronomy, Johns Hopkins University

12.2014: Institute of Advance Studies, Princeton

03.2014: University of Michigan

03.2013: Lunar and Planetary Laboratory, Dep. of Planetary Sciences, University of Arizona

02.2013: Space Telescope Science Institute

02.2013: New York Center for Astrobiology, Rensselaer Polytechnic Institute

01.2013: University of British Columbia (Canada)

04.2012: University of Bern (Switzerland)

12.2011: Institut de Ciències del Cosmos, Universidad de Barcelona (Spain)

09.2011: Department of Astrophysics and Planetary Science, University of Colorado

09.2011: Department Astronomy, University of Florida

03.2010: Department of Earth and Space Sciences, University of California Los Angeles

03.2010: Center for Astrophysics & Space Sciences, University of California San Diego

10.2009: Cátedra Jose Celestino Mutis, Universidad Nacional de Colombia (Colombia)

06.2009: Centro de Astrobiologia, INTA-CSIC, Madrid (Spain)

03.2009: Institute for Astronomy, University of Hawaii

01.2009: Institute for the Physics and Mathematics of the Universe (IPMU), Kashiwa (Japan)

09.2008: Department of Astrophysical Sciences, Princeton University

09.2008: Department of Astrophysical Sciences, Princeton University

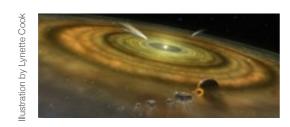
02.2008: Yukawa Institute for Theoretical Physics, Kyoto University, Kyoto (Japan)

02.2008: Institute of Astronomy, University of Tokyo, Tokyo (Japan)

01.2008: National Astronomical Observatory of Japan, Tokyo (Japan)

05.2007: Institute of Astronomy, Cambridge University (UK).

05.2007: Institute of Astronomy, Cambridge University (UK).



### Amaya Moro-Martín

### **Curriculum Vitae**

03.2007: University of California at Berkeley

02.2007: Institute of Advance Studies, Princeton

11.2006: DAMIR, CSIC, Madrid (Spain)

11.2006: Department of Astrophysics, Universidad Complutense de Madrid, Madrid (Spain)

10.2006: Canadian Institute for Theoretical Astrophysics (CITA), University of Toronto

07.2006: Centro de Astrobiologia, INTA-CSIC, Torrejón de Ardoz, Madrid (Spain)

05.2006: American Museum of Natural History, New York

05.2005: Institute for Astronomy, University of Hawaii

04.2005: Northwestern University, Chicago

01.2004: Carnegie Institution of Washington, DTM

# Invited & Review Talks at Conferences

(Review talks indicated with "R")

- 10.2010: IAU Symposium 276. The Astrophysics of Planetary Systems, Torino, Italy
- 09.2010: Herschel and the Formation of Stars and Planetary Systems, Goteborg, Sweden (R)
- 09.2010: Reunión de la Sociedad Española de Astronomía, Madrid, Spain
- 03.2010: European Science Foundation: Putting our Solar System in Context: Origin,
  Dynamical & Physical Evolution of Multiple Planet Systems, Universitätszentrum
  Obergurgl, Austria (R)
- 08/2009: The Dynamics of Discs and Planets, Isaac Newton Institute for Mathematical Sciences, Cambridge University
- 07/2009: Joint European-Japanese Workshop on Space Infrared Telescope for Cosmology and Astrophysics, University of Oxford
- 03/2009: Second Subaru International Conference on Exoplanets and Disks: Their Formation and Diversity, Keauhou, Hawaii (R)
- 10/2007: IAU Symp. 249: Exoplanets: detection, formation and dynamics, Suzhou, China (R)
- 09/2007: Astrophysics in the next decade: JWST and concurrent facilities
- 07/2007: Asia and Oceania Geosciences Society, 4th annual assembly, Bangkok, Thailand (R)
- 07/2007: Gordon Research Conference. Origins of Solar Systems, South Hadley (R)
- 04/2007: From stars to Planets, University of Florida
- 12/2006: Princeton University Planets and Life Symposium, Princeton University
- 09/2005: Dust in Planetary Systems, Kauai, Hawaii (R)
- 02/2005: Planet Formation and Detection, Aspen Center for Physics, Colorado
- 07/2004: 1st Joint Asia Oceania Geosciences Society Meeting, Singapore
- 06/2004: From Spitzer to Herschel and Beyond: The Future of Far-IR Space Astrophysics, Pasadena

## Talks at Conferences & Workshops

- 07/2014: 5th National Capital Area Disks meeting, Carnegie-DTM, Washington D.C.
- 09/2012: European Planetary Science Conference, Madrid, Spain
- 09/2011: Extreme Solar Systems II, Jackson Lake Lodge, Moran, Wyoming



## Amaya Moro-Martín

### **Curriculum Vitae**

03/2011: SAFARI consortium meeting, SRON, Utrecht, Netherlands

07/2010: Subaru Strategic Exploration of Exoplanets and Disks Meeting, Princeton University

06/2009: Encuentro español sobre exploración del sistema solar, Salobreña, Spain

06/2009: European Science Foundation Exploratory Workshop on Biosignatures On The Identity Of Life, Mulhouse, France

02/2009: Subaru Users Meeting: Subaru/HiClAO Science Workshop on Strategic Exploration of Exoplanets and Disks, NAOJ, Mitaka Japan

01/2009: Subaru Users Meeting, Mitaka, Japan

11/2008: Science and Technological Developments with SPICA, CSIC, Madrid, Spain

09/2008: Subaru/HiCIAO Science Workshop on Strategic Exploration of Exoplanets and Disks, NAOJ, Mitaka, Japan

02/2008: Subaru Users Meeting: Subaru/HiClAO Science Workshop on Strategic Exploration of Exoplanets and Disks, NAOJ, Mitaka Japan

02/2008: Subaru Users Meeting: Hyper Suprime Camera Workshop, NAOJ, Mitaka, Japan

06/2007: Extreme Solar Systems, Santorini, Greece

06/2006: The Planet-Disc Connection, Cambridge University, UK

10/2005: Michelson Fellowship Symposium, Caltech, Pasadena

10/2005: Workshop on Nearby Resolved Debris Disks, Space Telescope Science Institute

04/2005: Physics and Astronomy Long-term Planning Committee: Workshop on Astrobiology, Northwestern University

03/2005: Oxford-Princeton Workshop on Astrophysics and Cosmology, Princeton University

10/2004: The Dusty and Molecular Universe: A prelude to Herschel and ALMA, L'Observatorie de Paris, Paris, France

07/2004: Dust Disks and the Formation, Evolution and Detection of Habitable Planets, Mission Bay, San Diego

08/2003: SIRTF Galactic and Extragalactic Workshop, Pasadena

#### Science Policy Invited Talks

06.2014: European Science Open Forum in the session "Is science contributing to the division of Europe or can it help secure our common future?", Copenhagen, Denmark

10.2013: Ateneu Barcelonés, Barcelona, Spain

10.2013: ASCEGA Afterwork (Galicia Entrepreneur Association), A Coruña, Spain