

Ana-Maria A. Piso

CONTACT INFORMATION

Harvard-Smithsonian Center for Astrophysics
60 Garden Street, MS-10
Cambridge, MA 02138

Phone: (617) 818-6780
E-mail: apiso@cfa.harvard.edu
WWW: www.cfa.harvard.edu/~apiso

EDUCATION

Harvard University, Cambridge, MA

Ph.D., Astronomy & Astrophysics, May 2016 (expected)
Advisor: Dr. Karin Öberg
Thesis Topic: “The Effect of Disk Chemistry and Dynamics in Shaping Volatile Snowlines”

Harvard University, Cambridge, MA

A.M., Astronomy & Astrophysics, May 2013
Advisor: Dr. Ruth Murray-Clay
Research Exam Project: “On the Minimum Core Mass for Giant Planet Formation”

Massachusetts Institute of Technology, Cambridge, MA

S.B., Physics, June 2010 Major GPA: 4.6/5.0
S.B., Mathematics, June 2010 Major GPA: 4.8/5.0

RESEARCH EXPERIENCE & EMPLOYMENT

Research assistant

August 2010 - July 2011
Cambridge, MA

MIT, EAPS Department
Project: The Magnetic Field Signature of Super Earths
Advisor: Prof. Sara Seager

Undergraduate researcher

June 2008 - June 2010
Cambridge, MA

MIT, Kavli Institute of Astrophysics
Project: The Solar Wind (2008) & Structure of Accretion Disks (2009 - 2010)
Advisors: Dr. Paola Rebusco & Prof. Edmund Bertschinger

Research assistant

June 2009 - August 2009
Vienna, Austria

Viena University of Technology (TU Wien)
Project: Exact relativistic viscous fluid solutions in near horizon extremal Kerr background
Advisor: Dr. Daniel Grumiller

Undergraduate researcher

January 2007 - August 2007
Cambridge, MA

MIT, Laboratory of Nuclear Science
Project: Dark Matter Direct Detection
Advisors: Prof. Gabriela Sciolla & Dr. Denis Dujmic

Assistant manager

November 2005 - June 2006
Bucharest, Romania

Neuron Group S.R.L. Software Company
Digital map designer and database manager for the '112 Emergency Call Center' national project

TEACHING & OUTREACH

Teaching Fellow

February 2012 - May 2012
Cambridge, MA

Harvard College class SPU 30: Life as a Planetary Phenomenon
Course Head: Prof. Dimitar Sasselov
Held two weekly two-hour sections

Science Club For Girls Mentor Scientist

September 2014 - May 2015

Taught second grade girls at the Amigos School the class “Sound & Light” *Cambridge, MA*

WISTEM Program Mentor

Mentor for a Harvard College undergraduate

September 2013 - present

Cambridge, MA

CfA Summer Mentor

Co-mentored an REU summer student

June 2014 - August 2014

Cambridge, MA

Co-Organizer of Harvard Graduate Student Prospective Visits

March 2013

Organized and coordinated meetings and activities for two groups of 10 prospective graduate students each
Cambridge, MA

REFEREED
PUBLICATIONS

Piso, A.-M. A., Öberg, K. I., Birnstiel, T., & Murray-Clay, R. A. *C/O and Snowline Locations in Protoplanetary Disks: The Effect of Radial Drift and Viscous Gas Accretion*. ApJ, under review

Piso, A.-M. A., Youdin, A. N., & Murray-Clay, R. A. *Minimum Core Masses for Giant Planet Formation with Realistic Equations of State and Opacities*. ApJ, 2015, 800, 82

Piso, A.-M. A. & Youdin, A. N. *On the Minimum Core Mass for Giant Planet Formation at Wide Separations*. ApJ, 2014, 786, 21

PUBLICATIONS IN
PREPARATION

Piso, A.-M. A., Öberg, K.I., & Pegues, J. *The Role of Ice Compositions and Morphology For Snowlines and the C/N/O Ratios in Active Disks*

ONLINE
PUBLICATIONS &
EDUCATIONAL
MATERIAL

The Solar Wind

(Mathematica Demonstration Project: <http://demonstrations.wolfram.com/TheSolarWind/>)

Author: Ana-Maria Piso

The Interplanetary Magnetic Field (Parker Spiral)

(Mathematica Demonstration Project:

<http://demonstrations.wolfram.com/TheInterplanetaryMagneticFieldParkerSpiral/>

Author: Ana-Maria Piso

CONFERENCES AND
SEMINARS

Minimum Core Masses for Giant Planet Formation

CfA Exoplanet Pizza Lunch, Cambridge, MA, May 2015

Internal department talk

Minimum Core Masses for Giant Planet Formation

Star and Planet Formation in the Southwest, Oracle, AZ, March 2015

Contributed talk

On the Minimum Core Mass for Giant Planet Formation

CfA Exoplanet Pizza Lunch, Cambridge, MA, November 2013

Internal department talk

On the Minimum Core Mass for Giant Planet Formation

Protostars and Planets VI, Heidelberg, Germany, July 2013

Poster

On the Minimum Core Mass for Giant Planet Formation

IAUS 299: Exploring the Formation and Evolution of Planetary Systems, Victoria, BC, June 2013

Contributed talk

The Structure and Stability of Atmospheres Accreting around Protoplanetary Cores

Exoplanets in Multi-body Systems in the Kepler Era, Aspen, CO, February 2013

Poster

Magnetic field signature of Super Earths

AAS 217th Meeting, Washington, Seattle, January 2011

Poster

Exact relativistic viscous fluid solutions in NHEK background

APS April Meeting, Washington, DC, February 2010

Poster

The Solar Wind

Vienna Theory Lunch Club, TU Wien, Vienna, Austria, June 2009

Invited talk

PROFESSIONAL
ACTIVITIES &
SERVICE

American Physical Society member

American Astronomical Society member

SKILLS

Languages: Fluent in Romanian, English and Spanish, Conversant in German, Basics in French

Computer: Python, Mathematica, Matlab, LaTeX, C++, ROOT, Mac OS, Windows 2000/XP/Vista,

Microsoft Office, Corel, Database Desktop