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Harvard-Smithsonian Center for Astrophysics
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EDUCATION

Ph.D. in Physics, Expected 2009
University of Pennsylvania, Philadelphia, PA, USA

MS Physics, 2007
University of Pennsylvania, Philadelphia, PA, USA

Laurea degree in Astronomy, 2003
Università degli Studi di Bologna, Italy. Thesis entitled “Densita’ di Nane Bianche nell’Alone di Materia Oscura Galattico: simulazione sulla base di osservazioni MACHO”. Supervisor Prof. Bruno Marano.
Graded 110/110 *magna cum laude*

RESEARCH

Smithsonian Predoctoral Fellow
Harvard-Smithsonian Center for Astrophysics
Professor Charles Alcock (Fall 2005 through present)

Research Assistant
University of Pennsylvania Department of Physics and Astronomy
Professor Charles Alcock, Philadelphia, PA, USA (Spring 2004-Summer 2005)

Research focus:

- **Outer Solar System:** PI of the MMT ground based occultation survey and member of the TAOS collaboration, I work on determining the rate of occultation events due to trans-Neptunian bodies and to constrain Solar System models. I was also involved in the Software development and data analysis for TAOS, which collected over 30 Tb of data over 3 years of operation. Particular attention in this work was devoted to apply machine learning concepts to large datasets.
- **Galactic Halo:** establishing the contribution of White Dwarfs to the galactic dark matter

TEACHING

Teaching Assistant University of Pennsylvania Philadelphia, PA, USA
Teaching Mechanics Laboratories, Fall 2003, Spring 2004
Astronomy 1, Guest Lecturing, Harvard University, Spring 2008

GRANTS AND AWARDS

Smithsonian Predoctoral Fellowship, September 2005 through present

Instituto de Astrofísica de Canarias Tenerife, Canary Islands, Spain, Scholarship to attend the XVI CANARY ISLANDS WINTER SCHOOL OF ASTROPHYSICS, November 2004

Overseas Grant, University of Bologna, September 2003

RECENT INVITED TALKS

Physics Colloquium, University of Massachusetts Lowell, Lowell, MA – October 8 2008

Special Seminar, Herzberg Institute for Astrophysics, Victoria, BC, CA – September 30 2008

Monthly Meeting, Skyscrapers Amateur Astronomical Society of Rhode Island – September 5 2008

Brown Bag Lunch Talk, LPL, University of Arizona, AZ – July 2 2008

Optical Infrared Division Lunch Talk, CfA, Cambridge, MA – April 24 2008

Optical Infrared Division Lunch Talk, CfA, Cambridge, MA – April 24 2008

3rd Annual Smithsonian Predoctoral Symposium, CfA, Cambridge, MA – March 7 2008

TELESCOPE TIME AWARDED

MMT 6.5 meter telescope 10 nights observing with Megacam optical images in continuous readout mode between January 2007 and July 2008

PROFESSIONAL ORGANIZATIONS AND SCIENCE TEAMS

2004 to present, Member of the TAOS collaboration.

2007 to present, Member of the Time Series Center (TSC), Harvard, IIC.

COMPUTER SKILLS

Programming Languages: C, C++, Python, Perl, IDL, Unix, Linux, HTML

LANGUAGE SKILLS

Italian: native

English: fluent

French: conversational

Mandarin: basic knowledge