

Curriculum Vitae  
**Rosalba Perna**

## Education

- Ph.D. in Physics** **September 1994- June 1999**  
Harvard University, Cambridge, MA. Supervisor: Professor Avi Loeb. Thesis title: *Theoretical studies of Gamma-Ray Bursts*.
- Master in Physics** **September 1994- June 1996**  
Harvard University, Cambridge, MA.
- Piano Diploma** **September 1993**  
Conservatorio di Musica, Potenza, Italy.
- Laurea in Physics, cum laude** **November 1989–July 1993**  
Università di Salerno, Salerno, Italy. Thesis supervisor: Professor Sergio De Filippo. Thesis title: *Theory of the Integer and Fractional Quantum Hall Effect*

## Academic Appointments

- University of Colorado at Boulder** **September 2004– Present**  
Assistant Professor
- Princeton University** **September 2003– August 2004**  
Lyman Spitzer Fellow
- Harvard Society of Fellows** **July 1999– June 2003**  
Junior Fellow
- California Institute of Technology** **April 2002– June 2002**  
Visiting Scientist
- Osservatorio Astronomico di Roma, Italy** **January 2002– March 2002**  
Visiting Scientist
- Istituto di Astrofisica Spaziale, Italy** **October 2001– December 2001**  
Visiting Scientist
- Harvard University** **July 1997–June 1999**  
Research assistant
- Università di Salerno, Italy** **October 1992–August 1994**  
Undergraduate research (10/92-07/93) and research assistant (08/93-08/94)

## Teaching

- University of Colorado**
- Fall 2004, 2005, 2007, 2008 “Black Holes”, an undergraduate course for non-science majors.
- Spring 2006, 2007 “Internal Processes in Gases, part II”, a graduate level course.
- Fall 2006 “Astrophysics I, Stellar and Interstellar”, for undergraduate science majors.
- Spring 2008, Fall 2009 “Stars and Galaxies”, for undergraduate non-science majors.
- Fall 2009 “Neutron Stars”, graduate seminar.

## Awards and Honors

<b>Provost's Faculty Achievement Award</b> University of Colorado at Boulder	<b>July 2009</b>
<b>Spitzer Fellowship</b> Department of Astrophysics, Princeton University	<b>September 2003 - August 2004</b>
<b>Harvard Junior Fellowship</b> Harvard Society of Fellows	<b>July 1999 - June 2003</b>
<b>Award of Excellence</b> University of Salerno (Italy)	<b>October 2002</b>
<b>Predoctoral Fellowship</b> Smithsonian Astrophysical Observatory.	<b>August 1998 - May 1999</b>
<b>Amelia Earhart Fellowship</b> Zonta International Foundation	<b>September 1998 - May 1999</b>
<b>AWIS Predoctoral Award</b> Association for Women in Science Educational Foundation	<b>May 1998</b>
<b>Goldhaber Prize</b> Physics Department, Harvard University	<b>December 1997</b>
<b>Fellowship for Research Abroad</b> Physics Department, Università di Salerno (Italy).	<b>September 1996 – August 1998</b>
<b>Rudmose Fellowship</b> Physics Department, Harvard University	<b>September 1995 – June 1996</b>
<b>Student Award</b> ENAM (Italy)	<b>September 1984 – June 1998</b>
<b>Bronze Medal in Piano Competition</b> 4th National Piano Competition A.M.A. Calabria, Italy.	<b>May 1982</b>

## Selected Invited Conference Talks

*The interplay between Gamma-Ray Bursts and their environment*, presented at the 36th COSPAR Scientific Assembly, Beijing, China, 2006

*GRB Progenitors and Hosts in the Swift Era: constraints from time-variable opacities*, presented at the conference “GRB Physics before Swift”, State College, PA, April 9-10th 2004

*Afterglows of Short GRBs: What to expect*, presented at the 2nd Workshop “Gamma-Ray Bursts in the Afterglow Era”, Rome, Sept.17-20, 2002

*GRB Remnants*, presented at Conference “Gamma-Ray Bursts: The Brightest Explosions in the Universe”, Harvard University, May 20-23, 2002

*Properties of Afterglows produced by Mergers*, presented at the “First National Meeting on GRBs”, Rome, Dec. 12-14, 2001

## Invited Lectures

Princeton University, Physics dept., July 2004, lecture on “Black Holes” for the Princeton-Gran Sasso summer school.

La Scuola Normale Superiore, Dec. 2003; two lectures for PhD students on the topic of “Accretion in Astrophysics”.

## Invited Colloquia and Seminars

Caltech (04/2002), Santa Cruz (05/2002), Santa Barbara (05/2002), Chicago (01/2003), NYU (01/2003), Columbia (01/2003), Harvard (01/2003), Rutgers (02/2003), CU Boulder (02/2003), Rochester (03/2003), Stanford (04/2003), Berkeley (04/2003), Lawrence Livermore National Labs (04/2003), Princeton (12/2003), La Scuola Normale (12/2003), Cornell (02/2005), American Museum of National History (02/2005), Northwestern (03/2005), Chicago (04/2005), Rutgers (04/2005), Harvard (03/2006), Nanjing (07/2006), McGill (10/2006), Berkeley (04/2007), U. of Nevada (05/2007), CU Boulder (09/2008), Columbia (03/2009), Yale (05/2009), NYU (10/2009), U. of Southern California (10/2009), Harvard/ITC (10/2009), Ohio State (11/2009).

## Selected Approved Observing Proposals (as Co-I)

**Chandra:** Hot Accretion Flows in Quiescent Dwarf Novae

**Hubble:** Searching for light echoes after the SGR 1806-20- hyperflare

**Spitzer:** Gamma-Ray Bursts in the Spitzer/Swift Era

**NOAO:** Searching for Gamma-Ray Bursts in Nearby Galaxies

**VLT:** Probing Interstellar and Intergalactic matter through *UVES ToO* observations of GRB afterglows

**Parkes:** Searching for radio pulsations from the transient AXP in Westerlund 1

## Funding

*Reported only RP's amount when shared grant*

**NASA/Swift:** (PI) Constraining the Properties of the Gamma-Ray Burst Environment through time-variable absorption. Dates: 05/01/2005 - 04/30/2007. Award amount: \$40,000

**NSF-AST:** (PI) Gamma-Ray Bursts as Cosmological Probes. Dates: 07/01/2005 - 06/30/2008. Award amount \$277,707

**NASA/XMM:** (CoI) Unveiling the broad band properties of the fading transient AXP XTE J1810-197. Dates: 09/18/2006 - /09/17/2008. Award amount: \$39,044

**NASA/Spitzer:** (CoI) Gamma-Ray Burst Physics in the Spitzer/Swift Era. Dates: 06/13/2006 - 09/30/2008. Award amount: \$19,605

**NASA/Hubble:** (CoI) Searching for Light Echoes After the SGR 1806-20-Hyperflare. Dates: 04/01/2006 - 03/31/2009. Award amount: \$21,419

**NASA/XMM:** (CoI) Unveiling the quiescent emission properties of the fading transient AXP XTE J1810-197. Dates: 07/24/2008 - 07/23/2009. Award amount: \$33,500

**NASA/XMM:** (CoI) The Transient Bursting Anomalous X-Ray Pulsar in Westerlund 1. Dates: 08/17/2007 - 08/16/2009. Award amount: \$33,645

**NASA/XMM:** (CoI) Unveiling the Quiescent State Properties of the Transient AXP XTE J1810-197. Dates: 01/01/2008 - 12/31/2009. Award amount: \$33,626

**NASA/XMM:** (CoI) The post-awakening of the transient bursting anomalous X-ray pulsar in Westerlund 1. Dates: 07/24/08 - 07/23/2010. Award amount: \$16,919

**NASA/XMM:** (CoI) Prompt study of AXP outbursts with XMM. Dates: 01/01/2009 - 12/31/2010. Award amount: \$34,800

**NASA/Chandra:** (CoI) Prompt Study of Burst-Selected Outbursts from AXPs. Dates: 03/15/2009 - 03/14/2010. Award amount: \$20,727

**NASA/XMM:** (CoI) Unveiling the nature of the Period evolution of XTE J180-197. Dates: 08/13/2009 - 08/12/2010. Award amount: \$25,165

**NASA/XMM:** (CoI) XMM-Newton Observation of the new SGR 0501+4516 in its return to quiescence. Dates: 09/01/2009 - 08/31/2010. Award amount: \$26,376

**NASA/XMM:** (CoI) From Outburst to Quiescence: Monitoring the Transient X-ray Pulsar in Westerlund 1. Dates: 09/01/2009 - 08/31/2010. Award amount: \$25,553

**NASA/Chandra:** (CoI) Unveiling the nature of cyclic behavior in the period evolution of the Anomalous X-ray Pulsar XTE J1810-197 Dates: 01/01/2010 - 12/31/2010. Award amount: \$21,362

## **Panel Reviewer**

**Hubble** Cycle 12 (03/2003), Cycle 13 (03/2004)

**Swift** Cycle 1 (02/2004)

**Chandra** Cycle 7 (06/2005), Cycle 9 (06/2007), Cycle 11 (06/2009)

**NSF-AST** (04/2006)

**NASA-ATP** (09/2006)

**Fermi** Cycle 2 (05/2009)

## **Conference organization**

Member of the Scientific Organizing Committee for the parallel session on Gamma-Ray Bursts for the conference “New Views of the Universe”, Chicago, Dec. 2005.

Member of the Scientific Organizing Committee for the conference “Probing Stellar Populations Out to the Distant Universe”, Cefalu’ (Italy), Sept. 2008.

Member of the Scientific Organizing Committee for the conference “Gravitational Wave Bursts: Astrophysics, Data Analysis & Numerical Relativity”, Chichen-Itza (Mexico), Dec. 2009.

## **Departmental service**

“Diversity and graduate students concerns” committee, 2004, 2005, 2006

“Public relations and Newsletter” committee, 2004, 2005, 2006, 2007

Colloquium organizer (chair), 2005, 2006

Undergraduate advisor, 2006, 2007, 2009

Graduate admission committee, 2006, 2007, 2008

Comprehensive examination committee, 2009

Curriculum/majors committee, 2009

## **Personal**

Italian citizen. US permanent resident.

Hobbies: dance, music, travel.