

Enrico Ramirez-Ruiz
Assistant Professor
Department of Astronomy and Astrophysics
University of California, Santa Cruz

INTERESTS AND EXPERTISE

Stellar explosions, gamma-ray bursts accretion physics, nearcompact stars

ACADEMIC HISTORY

2003 Ph.D. in Astronomy & Astrophysics, University of Cambridge
1999 B. Sc. in Physics, Universidad Nacional Aut3noma de M3xico

POSITIONS HELD

2007- Assistant Professor, UC Santa Cruz
2003-06 Long Term Member, Institute for Advanced Study, Princeton
1999-03 Graduate Research and Teaching Assistant, University of Cambridge
2000-03 Research Tutor, International PPARC School, University of Cambridge
1998-99 Visiting Research Scientist, Space Science Division, LANL
1997-99 Undergraduate Research Assistant and Tutor, Physics Department, UNAM

HONORS AND AWARDS

2007- NASA GLAST Affiliated Scientist
2006- NASA Swift Science Team Member
2005- NASA Universe Working Group Member
2006 John Bahcall Fellowship, IAS Princeton
2003-06 Chandra Fellowship, NASA
2003 Hubble Fellowship, NASA (declined)
2003 Miller Fellowship, Berkeley (declined)
2002 American Academy of Achievement Award, Washington
1999-03 Newton Institute Junior Fellowship
1999 NIS Award in Space Science, LANL
1999 Young Scientist Presidential Award, Mexico
1999 Gabino Barreda Award in Physics, UNAM
1997 Leon Lederman Award in Physics

EXTERNAL RESEARCH SUPPORT (\$20,000 and over)

2007-08	NASA Swift Grant project "The Theory of Short Gamma-Ray Bursts"	\$30,000
2007-08	NASA Spitzer Grant Project "Imagining of Short GRBs"	\$50,000

RECENT PUBLICATIONS (selected)

$e\pm$ Pair Loading and the Origin of the Upstream Magnetic Field in GRB Shocks, E. Ramirez-Ruiz, K. Nishikawa, C.B. Hededal, *ApJ*, in press, 2007.

Deducing the Lifetime of Short Gamma-Ray Burst Progenitors from Host Galaxy Demography, Z. Zheng, E. Ramirez-Ruiz, *ApJ*, in press, 2006 (astro-ph/0601622).

The Progenitors of Short Gamma-Ray Bursts, W.H. Lee, E. Ramirez-Ruiz, *New Journal of Physics*, **9**, 17, 2007 (astro-ph/0701874).

Accretion Modes in Collapsars: Prospects for GRB Production, W.H. Lee, E. Ramirez-Ruiz, *ApJ*, **641**, 961, 2006 (astro-ph/0509307).

Evidence for a Canonical GRB Afterglow Light Curve in the Swift/XRT Data, J.A. Nousek, C. Kouveliotou, D. Grupe, K. Page, J. Granot, E. Ramirez-Ruiz, S.K. Patel, D.N. Burrows, V. Mangano, S. Barthelmy, A.P. Beardmore, S. Campana, M. Capalbi, G. Chincarini, G. Cusumano, A.D. Falcone, N. Gehrels, P. Giommi, M. Goad, O. Godet, C. Hurkett, J.A. Kennea, A. Moretti, P. O'Brien, J. Osborne, P. Romano, G. Tagliaferri, A. Wells, *ApJ*, **642**, 389, 2006 (astro-ph/0508332).

Diagnosing the Outflow from the SGR 1806-20 Giant Flare with Radio Observations, J. Granot, E. Ramirez-Ruiz, G.B. Taylor, D. Eichler, Y.E. Lyubarsky, R.A.M.J. Wijers, B.M. Gaensler, R.P. Fender, J.D. Gelfand, C. Kouveliotou, P.M. Woods, *ApJ*, **638**, 354, 2005 (astro-ph/0503251).

A Re-Brightening of the Radio Nebula Associated with the 2004 December 27 Giant Flare from SGR 1806-20, J.D. Gelfand, Y.E. Lyubarsky, D. Eichler, B.M. Gaensler, G.B. Taylor, J. Granot, K.J. Newton-McGee, E. Ramirez-Ruiz, C. Kouveliotou, R.A.M.J. Wijers, *ApJ*, **634**, L89, 2005 (astro-ph/0503269).

An Optical Supernova Associated with the X-Ray Flash XRF 060218, E. Pian, P.A. Mazzali, N. Masetti, P. Ferrero, S. Klose, E. Palazzi, E. Ramirez-Ruiz, S.E. Woosley, C. Kouveliotou, J. Deng, A.V. Filippenko, R. Foley, J. Fynbo, D.A. Kann, J. Hjorth, K. Nomoto, F. Patat, J. Sollerman, P.M. Vreeswijk, E.W. Guenther, A. Levan, P. O'Brien, N. Tanvir, R.A.M. J. Wijers, C. Dumas, O. Hainaut, L. Amati, E. Cappellaro, A.J. Castro-Tirado, F. Frontera, J. Greiner, K. Kawabata, K. Maeda, P. Moller, L. Nicastro, E. Rol, *Nature*, **442**, 1011, 2006 (astro-ph/0603530).

The State of the Circumstellar Medium Surrounding Gamma-Ray Burst Sources and its Effect on the Afterglow Appearance, E. Ramirez-Ruiz, G. Garcia-Segura, J.D. Salmonson, B. Perez-Rendon, *ApJ*, **631**, 435, 2005 (astro-ph/0412446).

Photospheric Signatures Imprinted on the Gamma-Ray Burst Spectra, E. Ramirez-Ruiz, *MNRAS*, **363**, L61, 2005 (astro-ph/0509232).

An Off-Axis Model for GRB 031203, E. Ramirez-Ruiz, J. Granot, C. Kouveliotou, S.E. Woosley, S.K. Patel, P. Mazzali, *ApJ*, **625**, L91, 2005 (astro-ph/0412145).

DEPARTMENTAL SERVICE

2006-07 Member, Colloquium Committee (Winter)
 Member, Preliminary Exam Committee
 Member, Search Committee

Five Major Presentations

2007 The Next Decade of GRB Afterglows, Amsterdam
2006 Physics Colloquium, University of Pennsylvania, Philadelphia
2006 Unveiling the Relativistic Universe, Venice, Italy
2006 DARK Cosmology Centre, Copenhagen, Denmark
2005 American Physical Society Meeting, Tampa, Florida