

Lorenzo Amati: Curriculum Vitae et Studiorum

(as of August 20th 2017; see also <http://www.iasfbo.inaf.it/~amati/>)

General Information

- *Born:* in Modena, Italy, on November, 8 1966
- *Nationality:* Italian
- *Foreign language:* English, French
- *Current working Institution:* INAF (Italian National Institute for Astrophysics) – IASF Bologna
- *Current affiliations:* IAU (International Astronomical Union) member; COSPAR (COmmittee on SPace Research) associate; ICRANet (International Center for Relativistic Astrophysics Network) faculty adjunct professor; SIGRAV (Società Italiana di GRAVitazione) member, ISGRG (International Society on General Relativity and Gravitation) member; member of the *Swift* (NASA) team; member of the LOFT (ESA) collaboration; member of the ATHENA (ESA) collaboration.
- *Main fields of research:* high energy astrophysics, cosmology, experimental astrophysics
- *Personal web page:* <http://www.iasfbo.inaf.it/~amati/>

Education and Scientific Career

- 2017 - : Research Director at INAF - Istituto di Astrofisica Spaziale e Fisica cosmica di Bologna, Bologna - Italy
- 2016 - : member of the advisory board of INAF - Istituto di Astrofisica Spaziale e Fisica cosmica di Bologna, Bologna - Italy
- 2016 - 2017: Senior Researcher at INAF - Istituto di Astrofisica Spaziale e Fisica cosmica di Bologna, Bologna - Italy
- 2011 - 2015: Member of the Board for Relativistic and Particle Astrophysics of the Italian National Institute for Astrophysics (INAF)
- 2011 -: Member of the Faculty of the PhD Program in Physics at University of Ferrara
- 2009 -: Adjunct Professor of the Faculty of the International Center for Relativistic Astrophysics Network (ICRANet), Italy
- 2007-2008: Member of the Space Astrophysics Working Group of the Italian Space Agency (ASI)
- 2002- 2016: Permanent research staff member at INAF - Istituto di Astrofisica Spaziale e Fisica cosmica di Bologna, Bologna - Italy
- 1998-2001: fixed-term research staff member at CNR - Istituto T.E.S.R.E., Bologna - Italy
- 1999: Ph.D. degree in Astronomy, Università "La Sapienza" di Roma - Italy, certificated on 06/05/1999: Thesis: "The BeppoSAX Gamma Ray Burst Monitor response matrix and its application to the study of Cosmic Gamma-Ray Bursts". Advisor: Dr. E. Costa (CNR - Roma)
- [1991 – 1992: Compulsory military service]
- 1991: Laurea (= Bachelor + Master) degree in Astronomy, University of Bologna - Italy, on July 19, 1991. Advisor: Prof. G.C. Palumbo (University of Bologna)

Notes: INAF = Italian National Institute for Astrophysics; CNR = Italian National Research Council.

Research activity (1995 – present)

- **Analysis and interpretation of space data from X and gamma-ray astrophysical sources:** Gamma-Ray Bursts, X-ray binaries, Cosmic X-ray Background
- **Cosmology with Gamma-Ray Bursts:** exploiting the “Amati relation” in GRBs for measuring cosmological parameters and investigating dark energy; using GRBs as probes of the early Universe (star formation rate evolution, first stars and galaxies, re.-ionization).
- **Space projects for high energy astrophysics:** BeppoSAX (1995-2002: on-ground and in-flight calibration and scientific exploitation of the GRB Monitor; member of the BeppoSAX GRB Team); Lobster-ISS (2002-2005: participation to the ESA phase-A study as responsible for the scientific requirements and definition of the GRB Monitor); Swift (since 2004: member of the Swift Team as Associate Scientist); LOFT / eXTP (since 2010: member of the proposing collaboration and Coordinator of the GRB Science Working Group during the current ESA assessment phase); ATHENA (member of WGs); THESEUS (international coordinator and lead proposer for the ESA/M4 and M5 proposals).
- **Responsible of the following funded projects:** "Studies of Gamma Ray Bursts and High Energy Sources with Swift" (by: ASI-INAF I/023/05/0; years: 2005-2006; role: Coordinator of the INAF/IASF Bologna Research Unit); "The role of Comptonization in GRBs and compact galactic and extra-galactic sources" (by: INAF; year: 2006; role: Coordinator); "A Gamma-Ray Burst Monitor (GRBM) Monitor for Lobster" (by: ASI-INAF I/088/06/0; years: 2007; role: Coordinator); "GRB physics and cosmology with spectral-energy correlations" (by: INAF; year: 2007; role: Coordinator); "A Gamma-Ray Burst Monitor (GRBM) for LWFT onboard Spectrum-RG and other soft X-ray all sky monitors" (by: ASI-INAF I/088/06/0; year: 2008; role: Coordinator); "A GRB Monitor for Lobster and other mission opportunities (SRG, MIRAX)" (by: ASI-INAF I/088/06/0; year: 2009; role: Coordinator); "Study of an Innovative Broad-band Gamma Ray Bursts and Transient Sources Monitor for Future Opportunity Missions" (by: INAF; year: 2010; role: Coordinator of the IASF Bologna research unit); "Cosmological Candles" (by the European Union in the framework of the programme FP7-PEOPLE-2013-IOF; year: 2015; role: Scientific Coordinator); "A space qualified very broad-band (1 keV - 10 MeV) monolithic detection system for Gamma-Ray Bursts and high-energy transients A space qualified very broad-band (1 keV - 10 MeV) monolithic detection system for Gamma-Ray Bursts and high-energy transients" (by INAF / Tecno-INAF 2014; year: 2015; role: National Coordinator).
- **Co-Investigator of 27 approved (by TAC) observations** with the major X-ray space observatories: BeppoSAX, Chandra, XMM, INTEGRAL

Prizes, awards and internationally recognized main achievements

- 2002: Senior author of the article, published on *Astronomy & Astrophysics*, reporting the discovery of the Ep,i – Eiso correlation in GRBs, named by the international community “Amati relation”; since then, **the name “Amati” is included in the title of 34 articles and in the abstract of 249 articles** (NASA/ADS , December 2015)

- 2002: Award of recognition for the **relevant contribution to the *BeppoSAX* mission** by the President of the Italian Space Agency (Prof. De Julio) and the Chairman of the *BeppoSAX* Steering Committee Prof. (L. Scarsi)
- 2007: Member of the “*Swift* team” **winner of the 2007 “Bruno Rossi Prize”** by the High Energy Astrophysics Division (HEAD) of the American Astronomical Society (AAS)
- 2000: **Senior author** of the article, [published on *Science*](#), reporting the first discovery of an iron absorption edge in the spectrum of a Gamma-Ray Burst (GRB) and the first redshift estimate of a GRB based on X-rays measurements
- 2015: **Lead Proposer** of the THESEUS (Transient High Energy Sky and Early Universe Explorer) proposal in response to the ESA Call for next M5 mission, coordinating a large international consortium.

Publications and Editorial activity

(see <http://www.iasfbo.inaf.it/~amati/curric/node6.html> for details)

- 148 articles on peer-reviewed international journals, 21 of which as senior (first) author
- 83 articles on conference proceedings volumes, 24 of which as senior (first) author
- Number of citations (as of August 2017): 7741 (based on NASA/ADS)
- h-index (as of August 2017): 44 (based on NASA/ADS)
- top five publications with number of citations (as of December 2015; based on NASA/ADS):
 - L. Amati, F. Frontera, M. Tavani, 2002, "Intrinsic spectra and energetics of BeppoSAX Gamma-Ray Bursts with known redshifts ", [Astronomy & Astrophysics](#), 390, 81 (807 cit.)
 - L. Amati, 2006, " The Ep,i - Eiso correlation in GRBs: updated observational status, re-analysis and main implications ", [Monthly Notices of the Royal Astronomical Society](#), 372, 233 (283 cit.)
 - L. Amati, C. Guidorzi, F. Frontera, et al., 2008, "Measuring the cosmological parameters with the Ep,i-Eiso correlation of Gamma-Ray Bursts", [Monthly Notices of the Royal Astronomical Society](#), 391, 577 (200 cit.)
 - L. Amati, F. Frontera, M. Vietri, et al., 2000, "Discovery of a Transient Absorption Edge in the X-ray Spectrum of GRB 990705", [Science](#), 290, 955 (148 cit.)
 - L. Amati, F. Frontera, C. Guidorzi, 2009, "Extremely energetic Fermi gamma-ray bursts obey spectral energy correlations", [Astronomy & Astrophysics](#), 508, 173 (118 cit.)
- Reviewer of 45 articles for peer-reviewed main international astrophysical journals: The Astrophysical Journal, Astronomy & Astrophysics, Monthly Notices of the Royal Astronomical Society, Publications of the Astronomical Society of Japan, Journal of Cosmology and Astroparticle Physics
- Member of the Editorial Board of *International Scholarly Research Notices* (Indawi) , *Galaxies* (MDPI), *The Scientific World Journal* (Indawi)

International Conferences and Advanced Schools

(see <http://www.iasfbo.inaf.it/~amati/curric/node4bis.html> for details)

- 34 invited presentations
- 7 solicited presentations
- 73 contributed presentations

- Member of the Scientific Organizing Committee of 6 International Conferences / Schools
- Member of the Local Organizing Committee of 4 International Conferences / Schools

Teaching and related experience

- 2011- Member of the Faculty of the PhD Program in Physics at the University of Ferrara
- 2009- Adjunct Professor of the Faculty of the International Center for Relativistic Astrophysics Network (ICRANet), Italy
- 2005: Lecturer at the International School of Space Science 2005 (L'Aquila, Italy)
- 2007: Lecturer at the Italian National School of Astrophysics (Venice, Italy)
- 2010- Lecturer for the International Relativistic Astrophysics Ph.D (IRAP PhD)
- 2010- Lecturer for the Ph.D. Program in Physics at University of Ferrara, Italy
- 2009- Member of Commissions for the Final Examination of PhD students in Physics and relativistic astrophysics

Complete list of Presentations at Conferences, Workshop, Schools

115) **June 2017** European Week of Astronomy and Space Science (EWASS 2017)
 Prague, Czech Republic
(two oral presentations)

114) **June 2017** Multifrequency Behaviour of High Energy Cosmic Sources - XII
 Palermo, Italy
(invited oral presentation)

113) **June 2017** The X-ray Universe 2017
 Roma, Italy
(oral presentation)

112) **May 2017** 15th AGILE Workshop "AGILE is 10"
 Roma, Italy
(invited oral presentation)

111) **February 2017** High Throughput X-ray Astronomy in the eXTP Era
 Roma, Italy
(solicited oral presentation)

110) **February 2017** Bright & Dark Universe
 Napoli, Italy
(oral presentation)

109) **December 2016** 9th International Workshop on Astronomical X-Ray Optics (AXRO 2016)
 Prague, Czech Republic
(invited oral presentation)

108) **November 2016** EXtrAS (Exploring the X-ray Transient and variable Sky) Workshop
Pavia, Italy
(oral presentation)

107) **November 2016** IV Italian National Workshop on GRBs
Bergamo, Italy
(invited session chair/rapporteur and oral presentation)

106) **October 2016** 11th Workshop on Science with the New generation of High Energy Gamma-ray Experiments (SCINEGHE16)
Pisa, Italy
(oral presentation)

105) **September 2016** SIGRAV 2016 XXII Conference - A Century of General Relativity
Cefalù, Italy
(invited oral presentation)

104) **September 2016** Astrophysical Probes of Fundamental Physics
Ferrara, Italy
(lecturer)

103) **July 2016** Signals from the Deep Past - Unveiling Early Cosmic Structures
Valletta, Malta
(oral presentation)

102) **July 2016** European Week of Astronomy and Space Science (EWASS 2016)
Athenis, Greece
(oral presentation)

101) **June 2016** SPIE Astronomical Telescopes + Instrumentation
Edinburgh, UK
(oral presentation)

100) **December 2015** 28th Texas Symposium on Relativistic Astrophysics
Geneve, Switzerland
(two oral presentations)

99) **December 2015** Lagrange Institute Conference "Cosmology and First Light"
Paris, France
(oral presentation)

98) **November 2015** International Conference "Albert Einstein and General Theory of Relativity"
Tirana, Albania
(invited oral presentation)

97) **September 2015** IX Italian National Workshop on Compact Objects (CNOC IX)
Monte Porzio Catone - Rome, Italy
(oral presentation)

96) **September 2015** Astrophysical Probes of Fundamental Physics
Ferrara, Italy

(lecturer)

95) **July 2015** Fourteenth Marcel Grossmann Meeting - MG14

Roma, Italy

(invited oral presentation)

94) **April 2015** ISSI-BJ Workshop on Gamma-Ray Bursts: a tool to explore the young Universe

Beijing, China

(invited oral presentation)

93) **December 2014** 7th International Workshop on Astronomical X-Ray Optics (AXRO 2014)

Prague, Czech Republic

(invited oral presentation)

92) **December 2014** Swift: 10 Years of Discoveries

Rome, Italy

(solicited oral presentation)

91) **September 2014** Ioffe Workshop on GRBs and other transient sources: 20 Years of Konus-Wind Experiment

Saint Petersburg, Russia

(invited oral presentation)

90) **September 2014** Third Bego Rencontres - IRAP Ph.D. Erasmus Mundus school

Nice, France

(lecturer)

89) **July 2014** The first billion years of galaxies and black holes

Sesto (Sexten) (BZ), Italy

(invited oral presentation)

88) **June 2014** The Unquiet Universe

Cefalu' (PA), Italy

(solicited oral presentation)

87) **May 2014** LVIII Congress of the Italian Astronomical Society (SAIt)

Milano, Italy

(invited oral presentation)

86) **April 2014** Bologna High Energy Meeting (BOHEME) 2014

Bologna, Italy

(oral presentation)

85) **October 2013** Photons, Neutrinos and Gravitational Waves: a multi-messenger search of high energy astrophysical sources

Acco, Israel

(invited oral presentation)

84) **October 2013** Second Annual Moscow GRB Conference: Gamma-Ray Bursts New Missions

To New Science

Moscow, Russia

(invited oral presentation)

83) **September 2013** VIII Italian National Workshop on Compact Objects (CNO<sup>C</sup> VIII)
Ferrara, Italy
(oral presentation)

82) **July 2013** European Week of Astronomy and Space Science (EWASS) 2013
Turku, Finland
(two oral presentations)

81) **June 2013** First LOFT UK Meeting
London, UK
(invited oral presentation)

80) **May 2013** Frascati Workshop 2013 - Multiwavelegth behaviour of High-Energy Astrophysical Sources
Palermo, Italy
(invited oral presentation)

79) **May 2013** Second Bego Scientific Rencontres Meeting
Nice, France
(two oral presentations as lecturer)

78) **April 2013** Huntsville Gamma Ray Burst Symposium - GRB 2013
Nashville TN, USA
(short oral / poster presentation and member of the Scientific Organizing Committee)

77) **January 2013** Scientific perspectives in the MeV domain
Paris, France
(oral presentation)

76) **October 2012** XX SIGRAV Conference
Napoli, Italy
(invited oral presentation)

75) **September 2012** Second LOFT Science Meeting
Toulouse, France
(oral presentation)

74) **September 2012** Third Italian National Workshop on GRBs - "Lampi su Napoli"
Napoli, Italy
(oral presentation and member of the Scientific Organizing Committee)

73) **July 2012** 13th Marcel Grossmann Meeting - MG13
Stockholm, Sweden
(solicited oral presentation)

72) **June 2012** 9th Workshop on Science with the New Generation of High Energy Gamma-ray Experiments
Lecce, Italy
(invited oral presentation)

71) **June 2012** First National Meeting on Science and Technology with SKA - The Italian pathway to SKA Rome, Italy
(invited oral presentation)

70) **May 2012** Gamma-Ray Bursts 2012 Conference
Munich, Germany
(oral presentation)

69) **March 2012** Death of Massive Stars: Supernovae & Gamma-Ray Bursts
Nikko, Japan
(oral presentation)

68) **November 2011** Swift and the surprising sky - The first 7 years of Swift
Milano, Italy
(oral presentation)

67) **October 2011** LOFT Science Meeting
Amsterdam, The Netherlands
(oral presentation)

66) **October 2011** Third Galileo - Xu Guangqi meeting
Beijing, China
(invited oral presentation)

65) **October 2011** IRAP Ph.D. Erasmus Mundus Workshop
Les Houches, France
(invited lecturer)

64) **September 2011** Second Ferrara Workshop on X-ray Astrophysics up to 511 keV
Ferrara, Italy
(oral presentation)

63) **July 2011** Chemical Evolution of GRB Host Galaxies
Sexten - Sesto Pusteria (BZ), Italy
(oral presentation)

62) **July 2011** 12th Italian-Korean Symposium on Relativistic Astrophysics
Pescara, Italy
(oral presentation)

61) **May 2011** Frascati Workshop 2011: Multifrequency Behaviour of High Energy Cosmic Sources
Vulcano (ME), Italy
(invited oral presentation)

60) **May 2011** GRBs as probes
Como, Italy
(oral presentation)

59) **November 2010** Gamma Ray Bursts 2010 Conference

Annapolis MD, USA
(oral presentation)

58) **September 2010** 8th Workshop on Science with the New Generation of High Energy Gamma-ray Experiments
Trieste, Italy
(oral presentation)

57) **July 2010** The second Galileo - Xu Guangqi meeting
Ventimiglia, Italy
(oral presentation)

56) **May 2010** Vulcano Workshop 2010 - Frontier Objects in Astrophysics and Particle Physics
Vulcano, Italy
(invited oral presentation)

55) **May 2010** 54th Meeting of the Italian Astronomical Society (SAIT)
Napoli, Italy
(oral presentation)

54) **April 2010** 8th AGILE Mini-Workshop - The Third Birthday
Bologna, Italy
(oral presentation)

53) **September 2009** The Shocking Universe
Venice, Italy
(Solicited oral presentation)

52) **July 2009** Twelfth Marcel Grossmann Meeting
Paris, France
(Invited oral presentation)

51) **June 2009** 6th Italian-Sino Workshop on Relativistic Astrophysics
Pescara, Italy
(oral presentation)

50) **May 2009** Frascati Workshop 2009: Multifrequency Behaviour of High Energy Cosmic Sources
Vulcano (ME), Italy
(Invited oral presentation)

49) **May 2009** 53rd Meeting of the Italian Astronomical Society (SAIT)
Pisa, Italy
(oral presentation)

48) **February 2009** 44th Rencontres de Moriond - Very High Energy Phenomena in the Universe
La Thuile, Italy
(invited oral presentation)

47) **October 2008** Third Biennial Leopoldina Conference on Dark Energy
Muenchen, Germany

(*poster presentation*)

46) **September 2008** Workshop: "Probing Stellar Populations out to the Distant Universe"
Cefalu' (PA), Italy
(*oral presentation*)

45) **July 2008** Third Stuckelberg Workshop
Pescara, Italy
(*oral presentation*)

44) **July 2008** Workshop "Dark Energy and Dark Matter"
Lyon, France
(*oral presentation*)

43) **May 2008** Vulcano Workshop 2008: Frontier Objects in Astrophysics and Particle Physics
Vulcano (ME), Italy
(invited oral presentation)

42) **May 2008** 52th Meeting of the Italian Astronomical Society (SAIT)
Teramo, Italy
(*oral presentation*)

41) **March 2008** Workshop "*43rd Rencontres de Moriond - Cosmology*"
La Thuile, Italy
(*oral presentation*)

40) **October 2007** Workshop "*Five years of INTEGRAL*"
Cagliari, Italy
(*oral presentation*)

39) **September 2007** *National School of Astrophysics - Cycle IX, Course II*
Venice, Italy
(*two lectures*)

38) **August 2007** Workshop "*A century of cosmology: past, present and future*"
Venice, Italy
(*poster presentation*)

37) **July 2007** *4th Italian-Sino Workshop: astrophysics at $z > 6$*
Pescara, Italy
(*oral presentation*)

36) **June 2007** *10th Italian-Korean Symposium on Relativistic Astrophysics*
Pescara, Italy
(*oral presentation*)

35) **June 2007** *VIth Marseille International Cosmology Conference: "Energetic events in the universe: from physics to Cosmology"*
Marseille, France
(invited oral presentation)

34) **May 2007** Workshop "Simbol-X: the hard X-ray universe in focus"
Bologna, Italy
(*oral presentation*)

33) **March 2007** Workshop "070228: the next decade of Gamma-Ray Burst afterglow"
Amsterdam, The Netherlands
(*oral presentation*)

32) **December 2006** EDGE General Meeting
Roma, Italy
(*oral presentation*)

31) **November 2006** Meeting of the Italian Swift collaboration
Merate, Italy
(*oral presentation*)

30) **July 2006** Eleventh Marcel Grossmann Meeting on General Relativity
Berlin, Germany
(*two oral presentation*)

29) **June 2006** 4th Workshop on: *Science with the New Generation of High Energy Gamma-ray Experiments*
Portoferraio, Isola d'Elba, Italy
(invited *oral presentation*)

28) **June 2006** SWIFT and GRBs: *Unveiling the Relativistic Universe*
Venice, Italy
(solicited *oral presentation*)

27) **November 2005** Relativistic Astrophysics and Cosmology: *the Einstein's Legacy*
Munich, Germany
(*oral presentation*)

26) **September 2005** International School of Space Science 2005: *Gamma-Ray Bursts: from Astrophysics to Cosmology*
L'Aquila, Italy
(invited *lecture*)

25) **May 2005** Frascati Workshop 2005 *Multifrequency Behavior of High Energy Cosmic Sources*
Vulcano, Italy
(invited *oral presentation*)

24) **October 2004** Fourth Workshop *Gamma-Ray Bursts in the Afterglow Era*
Roma, Italy
(solicited *oral presentation*)

23) **July 2004** 35th COSPAR Scientific Assembly
Paris, France
(*poster presentation*)

22) **June 2004** Second Workshop on *Science with the new generation of high energy Gamma-ray*

experiments

Bari, Italy

(*oral presentation*)

21) **April 2004** XLVIII Congresso della Società Astronomica Italiana *SAIT 2004*

Milano, Italy

(invited *oral presentation*)

20) **December 2003** Third National Workshop on *Compact Object Astrophysics (CNOC)*

Monte Porzio Carone (RM), Italy

(*oral presentation*)

19) **August 2003** JENAM Conference 2003 - Minisymposium *Physics of Gamma-Ray Bursts*

Budapest, Hungary

(invited *oral presentation*)

18) **May - June 2003** Frascati Workshop 2003 *Multifrequency Behavior of High Energy Cosmic Sources*

Vulcano, Italy

(invited *oral presentation*)

17) **May 2003** International Workshop *The Restless High Energy Universe*

Amsterdam, NL

(*poster presentation*)

16) **September 2002** Third Symposium *Gamma-Ray Bursts in the Afterglow Era*

Roma

(*oral presentation and member of the Local Organizing Committee*)

15) **July 2002** International Advanced School "Leonardo da Vinci" - Summer Course 2002:

Mission concept and payload design in X- and Gamma-ray Astronomy

Bologna, Italy

(**Member of the School Organizing Committee**)

14) **December 2001** First National Workshop on *Gamma-Ray Bursts*

Monte Porzio Catone, Italy

(*oral presentation*)

13) **September 2001** Second National Workshop on *Compact Object Astrophysics (CNOC)*

Bologna, Italy

(*oral presentation and member of the Local Organizing Committee*)

12) **May 2001** Frascati Workshop 2001 *Multifrequency Behavior of High Energy Cosmic Sources*

Vulcano, Italy

(*oral presentation*)

11) **May 2001** XLV Congresso della Società Astronomica Italiana *SAIT 2001* Bologna

(*oral presentation*)

10)) **October 2000** Secondo Symposium *Gamma-Ray Bursts in the Afterglow Era*

Roma

(*oral presentation*)

9) **May 2000** IX Convegno del Gruppo Nazionale di Fisica Cosmica
Lecce
(*oral presentation*)

8) **September 1999** LXXXV Congresso Nazionale della Societá Italiana di Fisica
Pavia
(*oral presentation*)

7) **September 1999** Symposium *X-ray Astronomy '999*
Bologna
(*poster presentation*)

6) **May 1999** Congresso Nazionale *Oggetti Compatti (CNOC)*
Como
(*oral presentation*)

5) **November 1998** Symposium *Gamma-Ray Bursts in the Afterglow Era*
Roma
(*poster presentation and member of the Local Organizing Committee*)

4) **September - October 1998** LXXXIV Congresso Nazionale della Societá Italiana di Fisica
Salerno
(*oral presentation*)

3) **October 1997** Symposium *The Active X-Ray Sky*, Accademia dei Lincei
Roma
(*poster presentation*)

2) **July - August 1997** 42simo SPIE's International Symposium on Optical Science, Engineering,
and Instrumentation
San Diego, California, USA
(*oral presentation*)

1) **April 1997** VII Symposium Nazionale del Gruppo Italiano di Fisica Cosmica
Villa Olmo (CO)
(*poster presentation*)

Complete list of Publications

Publications on International Refereed Journals (148)

- 148) R. Martone, L. Izzo, M. Della Valle, **L. Amati**, G. Longo, D. Gotz, **2017**, "*False outliers of the Ep,i - Eiso correlation?*", **Astronomy & Astrophysics**, **in press**
- 147) M. Demianski, E. Piedipalumbo, D. Sawant, **L. Amati**, **2017**, "*Cosmology with gamma-ray bursts. II. Cosmography issues and cosmological scenarios for the accelerated Universe*", **Astronomy & Astrophysics**, **598**, A113

- 146) M. Demianski, E. Piedipalumbo, D. Sawant, **L. Amati**, 2017, "Cosmology with gamma-ray bursts. I. The Hubble diagram through the calibrated Ep,i - Eiso correlation" , **Astronomy & Astrophysics**, **598**, A112
- 145) W., Yuan, **L. Amati**, J.K. Cannizzo, B. Cordier, N. Gehrels, G. Ghirlanda, D. Götz, N. Produit, Y. Qiu, J. Sun, N.R. Tanvir, J. Wei, C. Zhang, 2016, "Perspectives on Gamma-Ray Burst Physics and Cosmology with Next Generation Facilities" , **Space Science Reviews**, **202**, 235
- 144) **L. Amati**, D.S. Sawant, M. Della Valle, 2016, "GRB cosmology through the Ep,i - intensity correlation" , **Astronomical and Astrophysical Transactions**, **29/2**, 193
- 143) B. P. Abbott, R. Abbott, T. D. Abbott, M. R. Abernathy, F. Acernese, ..., **L. Amati**, et al., 2016, "Supplement: Localization and broadband follow-up of the gravitational-wave transient GW150914" , **The Astrophysical Journal Supplement**, **225**, 8
- 142) B. P. Abbott, R. Abbott, T. D. Abbott, M. R. Abernathy, F. Acernese, ..., **L. Amati**, et al., 2016, "Localization and broadband follow-up of the gravitational-wave transient GW150914" , **The Astrophysical Journal Letters**, **826**, L13
- 141) C. Guidorzi, S. Dichiara, **L. Amati**, 2016, "Individual power density spectra of Swift gamma-ray bursts" , **Astronomy & Astrophysics**, **589**, A98
- 140) S. Dichiara, C. Guidorzi, **L. Amati**, F. Frontera, R. Margutti, 2016, "A correlation between peak energy and Fourier power density spectrum slope in Gamma-Ray Bursts" , **Astronomy & Astrophysics**, **589**, A97
- 139) O. Bardho, B. Gendre, A. Rossi, **L. Amati**, J. Haislip, A. Klotz, E. Palazzi, D. Reichart, A.S. Trotter, M. Boer, 2016, "GRB 141221A: gone as the wind" , **Monthly Notices of the Royal Astronomical Society**, **459**, 508
- 138) F. Frontera, **L. Amati**, R. Farinelli, S. Dichiara, C. Guidorzi, R. Landi, L. Titarchuk, 2016, "Possible physical explanation of the intrinsic Ep,i- "intensity" correlation commonly used to "standardize" GRBs" , **International Journal of Modern Physics D**, **25**, 1630014
- 137) E. Zaninoni, M.G. Bernardini, R. Margutti, **L. Amati**, 2016, "Update on the GRB universal scaling Ex,iso-Egamma,iso-Epk with ten years of Swift data." , **Monthly Notices of the Royal Astronomical Society**, **455**, 1375
- 136) L. Izzo, M. Muccino, E. Zaninoni, **L. Amati**, M. Della Valle, 2015, "A new measurement of Omega_M from Gamma-Ray Bursts" , **Astronomy & Astrophysics**, **582**, A115
- 135) G. Ghirlanda, R. Salvaterra, G. Ghisellini, S. Mereghetti, G. Tagliaferri, S. Campana, J. P. Osborne, P. O.Brien, N. Tanvir, D. Willingale, **L. Amati**, S. Basa, M.G. Bernardini, D. Burlon, S. Covino, P. D.Avanzo, F. Frontera, D. Gotz, A. Melandri, L. Nava, L. Piro, S. D. Vergani, 2015, "Accessing the population of high redshift Gamma Ray Bursts" , **Monthly Notices of the Royal Astronomical Society**, **448**, 2514
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