



The Open University of Israel



Prof. Jonathan Granot

Department of Natural Sciences

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Born: 19 October 1971

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Education

- 1998 – 2001 Ph.D. in Physics, The Hebrew University of Jerusalem
- 1996 – 1998 M.Sc. (cum laude) in Physics, The Hebrew University of Jerusalem
- 1993 – 1996 B.Sc. (cum laude) in Physics and Mathematics, The Hebrew University of Jerusalem

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Fields of Research

- High-energy astrophysics: in particular Gamma-Ray Bursts and Magnetars
- Relativistic hydrodynamics and magneto-hydrodynamics; dynamics and structure of jets and shock waves
- Astrophysical tests of Lorentz invariance violation
- Gravitational lensing, Gravitational waves, High-energy neutrinos, Cosmic rays

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Academic Positions

- 2017 – Research Professor of Physics, George Washington University
- 2016 – Full Professor, The Open University of Israel
- 2012 – 2016 Associate Professor, The Open University of Israel
- 2008 – 2012 Reader in Astrophysics, University of Hertfordshire, UK
- 2007 – Principal Lecturer, University of Hertfordshire, UK

- 2008
- 2004 – 2007 Research Associate, Kavli Institute for Particle Astrophysics and Cosmology, Stanford University, California, USA
- 2001 – 2004 Member (postdoctoral scholar), Institute for Advanced Study, Princeton, New Jersey, USA

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Visiting Positions

- 2011 – 2012 Erskine Visiting Associate Professor, The Hebrew University of Jerusalem
- 2011 – 2012 Visiting Scientist, Tel Aviv University
- 2009 July-Sep. Visiting Scientist at Stanford University and UC Santa Cruz
- 2008 July-Aug. Visiting Scientist at Stanford University and UC Santa Cruz
- 2006 Jan.-Feb. Attended the program "The supernova Gamma-Ray Burst Connection" at the Kavli Institute for Theoretical Physics, UC Santa Barbara, California, USA
- 2000 Aug.-Oct. Kersten Visiting Fellow at the University of Chicago, Illinois, USA

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Current Postdocs

[Dr. Ramandeep Gill](#) (PhD 2012 at UBC with Jeremy Heyl; 2012-2015 postdoc at CITA with Chris Thompson)

[Dr. Emanuele Sobacchi](#) (PhD 2016 with Andrei Mesinger at Scuola Normale Superiore in Pisa)

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Honors, Prizes, Awards

- 2011 HEAD AAS Rossi Prize to B. Atwood, P. Michelson and the Fermi LAT team
- 2007 – 2012 Royal Society Wolfson Research Merit Award (significant salary enhancement + some research funds)
- 2007 HEAD AAS Rossi Prize to Neil Gehrels and the Swift team
- 2003 Keck Fellowship (Institute for Advanced Study, Princeton)

- 2000 A 3-year scholarship from the Horowitz Foundation (Hebrew University)
- 2000 The Giulio Racah prize for academic excellence (Hebrew University)
- 1999 M.Sc. cum laude in Physics (Hebrew University)
- 1997 B.Sc. cum laude in Physics and Mathematics (Hebrew University)
- 1995, 1996 Dean's list, Faculty of Mathematics and Natural Sciences, Hebrew University

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Professional Activities

Peer Review for: Nature, Science Magazine; Physical Review (Letters, D & E); Nature Astronomy; Nature Physics; Astrophysical Journal (Letters & main journal); Monthly Notices of the Royal Astronomical Society (Letters & main journal); Astronomy and Astrophysics; Reports on Progress in Physics; Advances in Space Research; Astroparticle Physics; Publications Astronomical Society of Japan; Journal of Cosmology and Astroparticle Physics (JCAP); Revista Mexicana de Astronomia y Astrofisica; Journal of High-Energy Astrophysics; Astrophysics and Space Science Transactions (ASTRA); International Journal of Modern Physics; New Journal of Physics; Publications of the Astronomical Society of Australia

Review of proposals for: National Aeronautics and Space Administration (NASA, US); National Science Foundation (NSF, US); European Research Council (ERC); US-Israel Binational Science Foundation (BSF); Israel Science Foundation (ISF); The German Research Foundation (DFG); European Science Foundation (ESF); Science & Technology Facilities Council (STFC, UK); The French National Research Agency (ANR); Scuola Normale Superiore (SNS, Italy); Aristeia (Greece); Gemini Observatory; William Herschel Telescope (WHT); LinkSCEEM; GMRT

Co-I in VLBA, VLA, VLT, EVN, WSRT, Chandra, Spitzer, and Hubble Space Telescope proposals; PI of a VLBA proposal

Chaired sessions or was a member of the SOC in many international conferences

Member of the Swift Science Theory Team 2006–

Affiliated Scientist with the Fermi Large Area Telescope collaboration 2007–

Member of Cherenkov Telescope Array collaboration (GRB task co-leader) 2008–

Israeli delegate, COST MP1304 “Exploring fundamental physics with compact stars” 2015–

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Administrative Activities

The Open University of Israel

- 2018 – Member, Academic Committee for the Transfer Channel Programs
- 2017 – Head of the Physics Program
- 2016 – 2017 Member, Open University Research Authority Steering Committee
- 2015 – Member, Open University Senate
- 2015 – 2017 Member, Academic Committee for the Recognition of Previous Studies
- 2014 – 2018, 2019 Member, Academic Committee for the Library
- 2012 – Member, Academic Subcommittee for Natural Sciences
- 2012 – Member, Faculty Council

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Select Research Grants

- 2014 – Israel Science Foundation, Grant on "Magnetized Relativistic Outflows in
2019 Astrophysical Sources"
(with Prof. Yuri Lyubarsky; 258,000 NIS/year)
- 2007 – Royal Society Wolfson Research Merit Award
2012 (18,000 GBP + 20,000 GBP/year salary enhancement)
- 2007 – Marie Curie International Reintegration Grant (100,000 Euro)
2011

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Invited Talks

- 55. “GRB Afterglow Polarization and GRB170817A / GW170817”, invited talk at the [pdf](#) workshop “Shedding New Light on Gamma-Ray Bursts with Polarization Data”, November 28, 2018, Geneva, Switzerland
- 54. “Lessons from GW170817 / GRB170817A”, invited plenary talk at the conference [pdf](#) “Exploring the Universe: Near Earth Space Science to Extra-Galactic Astronomy” (a tribute to the 125th birth anniversary of S. N. Bose), November 15, 2018, Kolkata, India
- 53. “GeV Emission from GRBs: New Perspectives from *Fermi*”, invited talk at the 15th Marcel [pdf](#) Grossmann meeting (MG15), given on behalf of Dr. Giacomo Vianello, July 6, 2018, Rome, Italy
- 52. “The Bright and the Slow – GRBs 100724B & 160509A with High-Energy Cutoffs at $<\sim 100$ MeV”, [pdf](#) invited talk at the 15th Marcel Grossmann meeting (MG15), given on behalf of Dr. Giacomo Vianello, July 2, 2018, Rome, Italy
- 51. “Lessons from GW170817 / GRB170817A”, invited talk at the 3rd PANDA Symposium on Time [pdf](#) Domain Astronomy and 1st results from Insight-HXMT, June 19, 2018, Chengdu, China
- 50. “Magnetic Fields in GRB”, invited review talk at the conference “Deciphering the Violent Universe”, [pdf](#) December 14, 2017, Playa del Carmen, Mexico
- 49. “Late Time GRB Radio Emission: Calorimetry & Identifying Orphan Afterglows” [pdf](#), “Radio Emission from NS-NS/BH Mergers” [pdf](#), invited talks at the 3rd Capitol Chats, on “Where are all the radio transients and what are they?”, August 16-18, 2017, GWU, Washington DC, USA
- 48. “GRB Prompt Emission Physics” [pdf](#), “Prompt GRB Emission: Spectra & Polarization” [pdf](#),

invited talks at the Workshop on Gamma-Ray Bursts: Prompt to Afterglow, July 4-7, 2017 NCRA-TIFR, Pune, Maharashtra, India

47. “Lessons from the First Magnetar Wind Nebula”, invited talk at the High Energy Astrophysics [pdf](#) Workshop, February 28, 2017, Jerusalem, Israel
46. “Magnetar Wind Nebula around Swift J1834.9-0854 – evidence for energy injection well above the spin-down power” [pdf](#), “Emission and Detectability of Magnetar Wind Nebulae” [pdf](#), “Evolution of Magnetars” [pdf](#), invited talks at the 2nd Capitol Chats, on “Magnetars, what are they? ”, July 13-15, 2016, GWU, Washington DC, USA
45. “Bounds on Lorentz Invariance Violation from Fermi Gamma-Ray Bursts”, invited plenary review [pdf](#) talk at the 17th Lomonosov Conference on Elementary Particle Physics, August 22, 2015, Moscow, Russia
44. “Jet in a Star” [pdf](#), “Magnetic Acceleration of GRB Jets” [pdf](#), “GRB 130427A: Evidence for Genuine Violation of $E_{\text{syn,max}}$ ” [pdf](#), invited talks at the 1st Capitol Chat, on “GRBs and their Prompt Emission Radiation Mechanism”, June 8-10, 2015, GWU, Washington DC, USA
43. “Gamma-Ray Bursts in the Fermi Era”, invited plenary review talk at the 5th Fermi Symposium, [pdf](#) October 23, 2014, Nagoya, Japan [pdf](#)
42. “Experimental Bounds on Quantum Gravity from Fermi GRB Observations”, invited review talk at the conference “Experimental Searches for Quantum Gravity”, September 3, 2014, SISSA, Trieste, Italy
41. “Jet Acceleration, Collimation and Stability”, invited talk at the workshop “The Strongest Magnetic Fields in the Universe”, February 6, 2014, at the International Space Science Institute, Bern, [pdf](#) Switzerland
40. “GRB Jet Dynamics”, invited review talk at the conference “Future Directions of Relativistic Jets”, [pdf](#) August 31, 2013, Skokloster, Sweden
39. “Searches for Quantum Gravity Signals using Gamma-Ray Bursts”, invited talk at the conference “LOOPS 2013”, July 23, 2013, at the Perimeter Institute, Waterloo, Canada ([the recorded talk](#))
38. “GRB Jets: a Theoretical Review”, an invited review talk at the workshop “Locating Astrophysical [pdf](#) Transients”, May 15, 2013, at the Lorentz Center, Leiden, The Netherlands
37. “Gamma-Ray Burst Prompt Emission Mechanism: Implications of Fermi Observations”, [pdf](#) invited talk at the 13th Meeting of the High Energy Astrophysics Division of the American Astronomical Society, April 10, 2013, Monterey, California, USA
36. “Constraining quantum gravity with GRBs”, invited talk at the conference “Experimental Search for [pdf](#) Quantum Gravity: the hard facts”, October 24, 2012, at the Perimeter Institute, Waterloo, Canada (also served as the Perimeter Institute Colloquium of that week; [the recorded talk](#))
35. “GRB jet dynamics: analytic models and numerical simulations”, invited talk at the Fall 2012 [pdf](#) Gamma-Ray Burst Symposium, October 9, 2012, Marbella, Malaga, Spain
34. “Magnetic field decay in magnetars and implications for evolutionary links”, invited talk at the 39th [pdf](#) COSPAR Scientific Assembly, July 19, 2012, Mysore, India
33. “GRB jet dynamics and afterglow lightcurves”, invited talk at the at the 13th Marcel Grossmann [pdf](#) meeting (MG13), July 6, 2012, Stockholm, Sweden
32. “Magnetized relativistic outflows: effects of strong time dependence”, invited talk at the at the 13th [pdf](#) Marcel Grossmann meeting (MG13), July 5, 2012, Stockholm, Sweden
31. “Gamma-ray bursts: review of the current status of the field and prospects for the future”, invited [pdf](#) review talk at the International Conference on Astrophysics and Cosmology (ICAC2012), March 20, 2012, Kathmandu, Nepal
30. “What we could learn from Cherenkov Telescope Array observations of gamma-ray bursts”, invited [pdf](#) talk at the 12th Meeting of the High Energy Astrophysics Division of the American Astronomical Society, September 7, 2011, Newport, Rhode Island, USA

29. “Constraints on Lorentz invariance violation from Fermi”, invited talk at the First LINK Workshop: [pdf](#) Probing physics beyond the Standard Model with CTA, November 12, 2010, Oxford, England, UK
28. “GRB theory in the Fermi era”, invited talk at the conference “Accretion and Outflow in Black Hole [pdf](#) Systems”, October 15, 2010, Kathmandu, Nepal
27. “Current status and future prospects of GRB science”, invited review talk at the RAS special [pdf](#) discussion meeting “Explosive Transients”, June 18, 2010, Liverpool, England
26. “Limits on Lorentz invariance violation from Fermi GRB observations”, invited talk at the [pdf](#) meeting “Fundamental Physics Laws: Lorentz Symmetry and Quantum Gravity”, June 2, 2010, Paris, France
25. “Highlights from Fermi GRB observations”, invited review talk at the Royal Astronomical Society NAM 2010, April 14, 2010, Glasgow, Scotland
24. “Highlights from Fermi gamma-ray space telescope observations of gamma-ray bursts”, invited talk at the “April” 2010 Meeting of the American Physical Society, February 14, 2010, Washington, DC, USA
23. “High-energy Fermi GRBs, long and short”, invited talk at the 215th meeting of the American Astronomical Society, January 4, 2010, Washington, DC, USA
22. “Some implications of Fermi high-energy GRB observations”, invited talk at the meeting “The Shocking Universe”, September 15, 2009, San Servolo, Venic, Italy
21. “High-energy emission from GRBs: first year highlights from the Fermi gamma-ray telescope”, invited talk at the program “Particle Acceleration in Astrophysical Plasmas”, August 17, 2009, KITP, Santa Barbara, CA, USA
20. “Similarities and differences between Fermi GRB 080825C and AGILE GRB 080514B”, invited talk at the 6th Science AGILE Workshop, April 23, 2009, Milan, Italy
19. “First results from Fermi on GRBs”, invited talk at the Symposium “First Results from the Fermi Gamma-ray Space Telescope”, March 7, 2009, Tokyo, Japan
18. “GRB theory in the Fermi era”, invited talk at the 44th Rencontres de Moriond on “Very High Energy Phenomena in the Universe”, Feb. 2, 2009, La Thuile, Italy
17. “Gamma-ray bursts and high-energy astrophysics”, invited talk at the STFC Introductory Summer School for new research students in astronomy, September 2, 2008, University of Hertfordshire, UK
16. “Theory of GRB afterglows”, invited review talk at the workshop “Supernovae and GRBs at low z and in the Era of Reionization” May 28, 2008, Darjeeling, India
15. “Critical review of basic afterglow concepts”, invited review talk at the conference “070228: The Next Decade of GRB Afterglows”, March 21, 2007, Amsterdam, The Netherlands
14. “Theory of GRB afterglows”, invited talk at the conference “Circumstellar Media and Late Stages of Massive Stellar Evolution”, Sep. 7, 2006, Ensenada, Mexico
13. “Structure and dynamics of GRB jets”, invited talk at the conference “Challenges in Relativistic Jets”, June 27, 2006, Cracow, Poland
12. “The magnetar-GRB connection and the giant flare from SGR 1806-20”, invited talk at the workshop “The Multicoloured Landscape of Compact Objects and their Explosive Origins”, June 13, 2006, Cefalu, Sicily, Italy
11. “The flat decay phase in the early X-ray afterglows of Swift GRBs”, invited talk at the conference “Swift and GRBs: Unveiling the Relativistic Universe”, June 5, 2006, Venice, Italy
10. “GRB jet propagation outside the progenitor”, invited talk at the conference “Supernova and GRB Remnants”, February 6, 2006, KITP, Santa Barbara, CA, USA
9. “Probing the magnetic field structure in GRBs through polarization measurements”, invited talk at the mini-conferen was part of the 47th Annual Meeting of the Division of Plasma Physics of the American Physical Society, October 25, 2005, Denver, CO, USA
8. “Physics of GRB jets”, invited talk at the summer school “Gamma-Ray Bursts: The First Three Hours”, August 31, 2005, Santorini, Greece
7. “Electromagnetic models of gamma-ray bursts: a tutorial”, invited talk given on behalf of Prof. Roger

148. "Off-Axis Emission of Short GRB Jets from Double Neutron Star Mergers and GRB 170817A", [pdf](#) **Granot, J.**, Gill, R., Guetta, D., & De Colle, F. 2018, MNRAS, **481**, 1597 – 1608
147. "Lessons from the short GRB 170817A – the First Gravitational Wave Detection of a Binary [pdf](#) Neutron Star Merger", **Granot, J.**, Guetta, D., & Gill, R. 2017, ApJ Lett., **850**, L24 (5 pages)
146. "The Sleeping Monster: NuSTAR observations of SGR 1806-20, 11 years after the Giant [pdf](#) Flare", Younes, G. A., Baring, M. G., Kouveliotou, C., Harding, A., Donavan, S., Göğüs, E., Caspi, V., & **Granot, J.**, ApJ, **851**, 17 (8 pages)
145. "2D Relativistic MHD Simulations of the Kruskal-Schwarzschild Instability in a Relativistic [pdf](#) Striped Wind", Gill, R., **Granot, J.**, & Lyubarsky, Y. 2018, MNRAS, **474**, 3535 – 3546
144. "The Bright and the Slow – GRBs 100724B & 160509A with High-Energy Cutoffs at $< \sim 100$ [pdf](#) MeV", Vianello, G., Gill, R., **Granot, J.**, Omodei, N., Cohen-Tanugi, J., & Longo, F. 2018, ApJ, **864**, 163 (26 pages)
143. "A Common Central Engine for Long Gamma-Ray Bursts and Type Ib/c Supernovae?", [pdf](#) Sobacchi, E., **Granot, J.**, Bromberg, O., & Sormani, M. C. 2017, MNRAS, **472**, 616 – 627
142. "X-ray and Radio Observations of the Magnetar J1935+2154 During its 2014, 2015, and 2016 [pdf](#) Outbursts", Younes, G. A., Kouveliotou, C., Jaodand, A., Baring, M. G., van der Horst, A.G., Harding, A., Hessels, J. W., Gehrels, N., Gill, R., Huppenkothen, D., **Granot, J.**, Göğüs, E., & Lin, L. 2017, 2017, ApJ, **847**, 85 (15 pages)
141. "Burst and Outburst Characteristics of Magnetar 4U 0142+61", Göğüs, E., Lin, L., Roberst, O. J., [pdf](#) Chakraborty, M., Kaneko, Y., Gill, R., **Granot, J.**, van der Horst, A., Watts, A. L., Baring, M.G., Kouveliotou, C., Huppenkothen, D., & Younes, G. 2017, ApJ, **835**, 68 (8 pages)
140. "The High Frequency Radio Emission of the Galactic Center Magnetar SGR J1745–29 during a [pdf](#) Period", Gelfand, J., Ransom, S., Kouveliotou, C., **Granot, J.**, van der Horst, A., Zhang, G., Göğüs, E., Roberst, M. S. E., & al Ali, H. 2017, ApJ, **850**, 53
139. "Prospects for Cherenkov Telescope Array Observations of the Young Supernova Remnant RX [pdf](#) J1713.7-3946 ", The CTA Consortium, 2017, ApJ, **840**, 74 (14 pages)
138. "Learning about the Magnetar Swift J1834.9–0846 from its Wind Nebula ", [pdf](#) **Granot, J.**, Gill, R., Younes, G. A., Gelfand, J., Harding, A., Kouveliotou, C., & Baring, M. G. 2017, MNRAS, **464**, 4895 – 4926
137. "Detection of Very Low Frequency Quasi-Periodic Oscillations in the 2015 Outburst of V404 [pdf](#) Cygni", Huppenkothen, D., Younes, G., Ingram, A., Kouveliotou, C., Göğüs, E., Bachetti, M., Sanchez-Fernandez, C., Motta, S., van der Klis, M., **Granot, J.**, Gehrels, N., Kuulkers, E., Tomsick, J. A., & Walton, D. J. 2017, ApJ, **834**, 90 (17 pages)
136. "A Unified Model for GRB Prompt emission from Optical to Gamma Rays; a New Type of [pdf](#) Standard Candle", Guiriec, S., Kouveliotou, C., Hartmann, D. H., **Granot, J.**, Asano, K., Meszaros, P., Gill, R., Gehrels, N., & McEnery, J. 2016, ApJ Lett., **831**, L8 (6 pages)
135. "Searching the Gamma-Ray Sky for Counterparts to Gravitational Wave Sources: Fermi GBM [pdf](#) and LAT Observations of LVT151012 and GW151226 ", Racusin, J. L., et al. 2017, ApJ, **835**, 82 (13 pages)
134. "Fermi-LAT Observations of the LIGO Event GW150914", The Fermi LAT Collaboration, 2016, [pdf](#) ApJ Lett., **823**, L2 (13 pages)
133. "The Wind Nebula Around Magnetar Swift J1834.9–0846", Younes, G. A., Kouveliotou, C., [pdf](#) Kargaltsev, O., Gill, R., **Granot, J.**, Watts, A. L., Gelfand, J., Baring, M. G., Harding, A., Pavlov, G. G., van der Horst, A.G., Huppenkothen, D., Göğüs, E., Lin, L., & Roberts, O. J. 2016, ApJ, 824, 138
132. "GRBs from Magnetic Reconnection: Variability and Robustness of Lightcurves", [pdf](#) **Granot, J.** 2016, ApJ Lett., **816**, L20 (6 pages)
131. "Properties of GRB Lightcurves from Magnetic Reconnection", [pdf](#) Beniamini, P., & **Granot, J.** 2016, MNRAS, 459, 3635 – 3658
130. "Five Year Fermi/GBM Magnetar Burst Catalog", Collazzi, A. C., Kouveliotou, C., van der Horst, A.

- J., Younes, G. A., Kaneko, Y., Göğüs, E., Lin, L., **Granot, J.**, Finger, M. H., Chaplin, V. L., Huppenkothen, D., Watts, A. L., von Kienlin, A., Baring, M. G., Gruber, D., Baht, P. N., Gibby, M. H., Gehrels, N., McEnery, J., van der Klis, M., & Wijers, R.A.M.J. 2015, *ApJS*, **218**, 11
- [pdf](#)
129. "A Planck-scale limit on spacetime fuzziness and stochastic Lorentz invariance violation", [pdf](#) Vasileiou, V., **Granot, J.**, Piran, T., & Amelino-Camelia, G. 2015, *Nature Physics*, **11**, 344 – 346
128. "On the Composition of GRBs' Collapsar Jets", [pdf](#) Bromberg, O., **Granot, J.**, & Piran, T. 2015, *MNRAS*, **450**, 1077 – 1084
127. "A Comprehensive Radio View of the Extremely Bright Gamma-Ray Burst 130427A", [pdf](#) van der Horst, A. J., Paragi, Z., de Bruyn, A. G., **Granot, J.**, Kouveliotou, C., Wiersema, K., Starling, R. L. C., Curran, P. A., Wijers, R. A. M. J., Rowlinson, A., Anderson, G. A., Fender, R. P., Yang, J., & Strom, R. G. 2014, *MNRAS*, **444**, 3151 – 3163
126. "Quasi-Periodic Oscillations in Short Recurring Bursts of the Soft Gamma Repeater J1550-5418", [pdf](#) Huppenkothen, D., D'Angelo, C., Watts, A. L., Heil, L., van der Klis, M., van der Horst, A. J., Kouveliotou, C., Baring, M. C., Göğüs, E., **Granot, J.**, Kaneko, Y., Lin, L., von Kienlin, A., Younes, G. 2014, *ApJ*, **787**, 128
125. "The Dynamics of a Highly Magnetized GRB Jet Propagating inside a Star", [pdf](#) Bromberg, O., **Granot, J.**, Lyubarsky, Y., & Piran, T. 2014, *MNRAS*, **443**, 1532 – 1548
124. "Time Resolved Spectroscopy of SGR J1550–5418 for the Fermi/GBM Bursts ", [pdf](#) Younes, G., Kouveliotou, C., van der Horst, A. J., Baring, M. G., **Granot, J.**, Watts, A. L., Bhat, P. N., Collazzi, A., D'Angelo, C. R., Gehrels, N., Gorgone, N., Göğüs, E., Gruber, G., Grunblatt, S., von Kienlin, A., Lin, L., McEnery, J., van der Klis, M., & Wijers, R. A. M. J. 2014, *ApJ*, **785**, 52
123. "Radio Limits on Off-Axis GRB Afterglows and VLBI Observations of SN 2003gk", [pdf](#) Bietenholz, M. F., De Colle, F., **Granot, J.**, Bartel, N., & Soderberg, A. M 2014, *MNRAS*, **440**, 821 – 832
122. "Gamma-Ray Burst Jets and their Radio Observations", [pdf](#) **Granot, J.**, & van der Horst, A. J. 2014, *PASA*, **31**, e008 (invited review in a special issue on "Locating Astrophysical Transients")
121. "Lorentz Invariance Violation: latest Fermi results and GRB/AGN complementarity", [pdf](#) Bolmont, J., Vasileiou, V., Jacholkowska, J., Piron, F., Couturier, C., **Granot, J.**, Stecker, F. W., Cohen-Tanugi, J., & Longo, F. 2014, *Nuclear Instruments and Methods in Physics Research*, **742**, 165 – 168
120. "The First Pulse of the Extremely Bright GRB130427A: A Test Lab for Synchrotron Shocks", [pdf](#) Preece, R., et al. 2014, *Science*, **343**, 51 – 54
119. "Fermi-LAT Observations of the Gamma-ray Burst GRB130427A", [pdf](#) Ackermann, M., et al. 2014, *Science*, **343**, 42 – 47
118. "NuSTAR Observations of GRB130427A Challenge GRB Afterglow Emission Models", [pdf](#) Kouveliotou, C., **Granot, J.**, Racusin, J., Belm, E., Vianello, G., Oats, S., Fryer, C. L., Boggs, S. E., Christensen, F. E., Craig, W. W., Dermer, C. D., Gehrels, N., Hailey, C. J., Harrison, F. A., Melandri, A., McEnery, J. E., Mundel, C. G., Stern, D. K., Tagliaferri, G., & Zhang, W. W. 2013, *ApJ Lett.*, **779**, L1
117. "Broad-band Monitoring Tracing the Evolution of the Jet and Disc in the Black Hole Candidate X-ray Binary MAXI J1659–152", [pdf](#) van der Horst, A. J., Curran, P. A., Miller-Jones, J. C. A., Linford, J. D., Gorosabel, J., Russell, D. M., de Ugarte Postigo, A., Lundgren, A. A., Taylor, G. B., Maitra, D., Guziy, S., Belloni, T. M., Kouveliotou, C., Jonker, P. G., Kamble, A., Paragi, Z., Homan, J., Kuulkers, E., **Granot, J.**, Altamirano, D., Buxton, M. M., Castro-Tirado, A., Fender, R. P., Garrett, M. A., Gehrels, N., Hartmann, D. H., Kennea, J. A., Krimm, H. A., Mangano, V., Ramirez-Ruiz, E., Romano, P., Wijers, R. A. M. J., Wijnands, R., Yang, Y. J. 2013, *MNRAS*, **436**, 2625
116. "Constraints on Lorentz Invariance Violation from Fermi/LAT Observations of GRBs" [pdf](#) Vasileiou, V., Jacholkowska, J., Piron, F., Bolmont, J., Couturier, C., **Granot, J.**, Stecker, F. W., Cohen-Tanugi, J., & Longo, F. 2013, *PRD*, **87**, 122001
115. "Gamma-Ray Burst Jet Dynamics", **Granot, J.** 2013, invited review for the Fall 2012 GRB

- [pdf](#) Symposium, held in Marbella, Spain; EAS Publication Series, **61**, 141 – 152
114. "Quasi-Periodic Oscillations and broadband variability in short magnetar bursts"
[pdf](#) Huppenkothen, D., Watts, A. L., Uttley, P., van der Horst, A., van der Klis, M., Kouveliotou, C., Göğüs, E., **Granot, J.**, Vaughan, S., & Finger, M. H. 2013, *ApJ*, **768**, 87
113. "New Fermi-LAT Event Reconstruction reveals More High-Energy Gamma-Rays from GRBs"
[pdf](#) The Fermi LAT Collaboration, 2013, *ApJ*, **774**, 76 (**J. Granot** is a contact author)
112. "The First Fermi LAT Gamma-Ray Burst Catalog"
[pdf](#) The Fermi LAT Collaboration, 2013, *ApJS*, **209**, 11
111. "Multiwavelength observations of GRB 110731A: GeV emission from onset to afterglow"
[pdf](#) The Fermi LAT and Fermi GBM Collaborations, 2013, *ApJ*, **763**, 71
110. "VLBI observations of the shortest orbital period black hole binary, MAXI J1659-152"
[pdf](#) Paragi, Z., van der Horst, A. J., Belloni, T., Miller-Jones, J. C. A., Yang, J., Garrett, M. A., **Granot, J.**, Kouveliotou, C., Kuulkers, E., Wijers, R. A. M. J. 2013, *MNRAS*, **432**, 1319 – 1329
109. "VLBI and Archival VLA and WSRT Observations of the GRB 030329 Radio Afterglow"
[pdf](#) Mesler, R. A., Pihlström, Y. M., Taylor, G. B., & **Granot, J.** 2012, *ApJ*, **759**, 4
108. "Constraints on the emission model of the "Naked-Eye Burst" GRB080319B"
[pdf](#) Abdo, A. A., Abeysekara, A. U., Allen, B. T., Aune, T., Berley, D., Chen, C., Christopher, G. E., DeYoung, T., Dingus, B. L., Ellsworth, R. W., Gonzalez, M. M., Goodman, J. A., Granot, J., Hays, E., Hoffman, C. M., Hütemeyer, P. H., Kolterman, B. E., Linnemann, J. T., McEnery, J. E., Mincer, A. I., Morgan, T., Nemethy, P., Pretz, J., Ramirez-Ruiz, E., Ryan, J. M., Saz Parkinson, P. M., Shoup, A., Sinnis, G., Smith, A. J., Vasileiou, V., Walker, G. P., Williams, D. A., and Yodh, G. B. 2012, *ApJ Lett.*, **753**, L31
107. "Detection of spectral evolution in the bursts emitted during the 2008-2009 active episode of SGR J1550-5418", von Kienlin, A., Gruber, D., Kouveliotou, C., **Granot, J.**, Baring, M. G., Göğüs, E., Huppenkothen, D., Kaneko, Y., Lin, L., Watts, A. L., Bhat, P. N., Guiriec, S., van der Horst, A. J., Bissaldi, E., Greiner, J., Meegan, C. A., Paciecias, W. A., Preece, R. D., & Rau, A. 2012, *ApJ*, **755**, 150
[pdf](#)
106. "Broadband Spectroscopy of SGR J1550-5418 Bursts", Lin, L., Göğüs, E.,
[pdf](#) Baring, M. G., **Granot, J.**, Kouveliotou, C., Kaneko, Y., van der Horst, A., Gruber, D., von Kienlin, A., Younes, G., Watts, A. L., & Gehrels, N. 2012, *ApJ*, **756**, 54
105. "Constraining the High-Energy Emission from Gamma-ray Bursts with Fermi"
[pdf](#) The Fermi LAT and Fermi GBM Collaborations, 2012, *ApJ*, **754**, 121
104. "Scaling relations between numerical simulations and physical systems they represent",
[pdf](#) **Granot, J.** 2012, *MNRAS*, **421**, 2610 – 2615
103. "Introducing the CTA Concept", The CTA Consortium, 2013, *Astroparticle Physics*, **43**, 3 – 18
[pdf](#)
102. "Gamma-ray burst science in the era of the Cherenkov Telescope Array",
[pdf](#) Inoue, S., **Granot, J.**, O'Brien, P. T., Asano, K., Bouvier, A., Carosi, A., Connaughton, V., Garczarczyk, M., Gilmore, R., Hinton, J., Inoue, Y., Ioka, K., Kakuwa, J., Markoff, S., Murase, K., Osborne, J. P., Otte, A. N., Starling, R., Tajima, H., Teshima, M., Toma, K., Wagner, S., Wijers, R. A. M. J., Williams, D. A., Yamamoto, T., & Yamazaki, for the CTA consortium, 2013, *Astroparticle Physics*, **43**, 252 – 275
101. "Design concepts for the Cherenkov Telescope Array CTA: an advanced facility for ground-based high-energy gamma-ray astronomy",
[pdf](#) The CTA Consortium, 2011, *Exp. Astron.*, **32**, 193 – 316
100. "On the lateral expansion of GRB jets"
[pdf](#) **Granot, J.** & Piran, T. 2012, *MNRAS*, **421**, 570 – 587
99. "Simulations of GRB Dynamics in a Stratified External Medium: Afterglow Lightcurves, Jet Breaks and Radio Calorimetry",
[pdf](#) De Colle, F., Ramirez-Ruiz, E., **Granot, J.**, & Lopez-Camara, D. 2012, *ApJ*, **751**, 57
98. "The effects of sub-shells in highly magnetized relativistic flows"
[pdf](#) **Granot, J.** 2012, *MNRAS*, **421**, 2467 – 2477

97. "Interaction of a highly magnetized impulsive relativistic flow with an external medium", [pdf](#) **Granot, J.** 2012, MNRAS, **421**, 2442 – 2466
96. "Magnetic Field Decay in Neutron Stars: from SGRs to Weak Field Magnetars", [pdf](#) Dall'Osso, S., **Granot, J.**, & Piran, T. 2012, MNRAS, **422**, 2878 – 2903
95. "Gamma-Ray Burst Dynamics and Afterglow Radiation from Adaptive Mesh Refinement, Special Relativistic Hydrodynamic Simulations", [pdf](#) De Colle, F., **Granot, J.**, Lopez-Camara, D., & Ramirez-Ruiz, E. 2012, ApJ, **746**, 122
94. "SGR J1550-5418 Bursts Detected with the Fermi Gamma-ray Burst Monitor During its Most Prolific Activity", [pdf](#) van der Horst, A. J., Kouveliotou, C., Gorgone, N. M., Kaneko, Y., Baring, M. G., Guiriec, S., Göğüs, E., **Granot, J.**, Watts, A. L., Lin, L., Bhat, P. N., Bissaldi, E., Briggs, M. S., Chaplin, V. L., Connaughton, V., Finger, M. H., Gehrels, N., Gibby, M. H., Giles, M. M., Goldstein, A., Harding, A. K., Kaper, L., Kaspi, V. M., von Kienlin, A., van der Kils, M., McBreen, S., McEnery, J., Meegan, C. A., Preece, W. S., Pe'er, A., Preece, R. D., Ramirez-Ruiz, E., Rau, A., Wachter, S., Wilson-Hodge, C., Woods, P. M., & Wijers, R. A. M. J. 2012, ApJ, **749**, 122
93. "Burst and Persistent Emission Properties during the Recent Active Episode of the Anomalous X-ray Pulsar 1E 1841-045", [pdf](#) Lin, L., Kouveliotou, C., Göğüs, E., van der Horst, A. J., Watts, A. L., Baring, M. G., Wijers, R.A.M.J., Woods, P. M., Gehrels, N., **Granot, J.**, Guiriec, S., Kaneko, Y., Kaspi, V., McEnery, J., Tierney, D., van der Klis, M., von Kienlin, A., & Zhang, S. N. 2011, ApJ Lett., **740**, L16
92. "Fermi/Gamma-ray Burst Monitor Observations of SGRJ0501+4516 Bursts", [pdf](#) Lin, L., Kouveliotou, C., Baring, M. G., van der Horst, A. J., Guiriec, S., Woods, P. M., Göğüs, E., Kaneko, Y., Scargle, J., **Granot, J.**, Preece, R., von Kienlin, A., Chaplin, V., Watts, A. L., Wijers, R.A.M.J., Zhang, S. N., Baht, N., Finger, M. H., Gehrels, N., Harding, A., Kaper, L., Kaspi, V., McEnery, J., Meegan, C. A., Preece, W. S., Pe'er, A., Ramirez-Ruiz, E., van der Klis, M., Wachter, S., & Wilson-Hodge, C. 2011, ApJ, **739**, 87
91. "X-ray flare candidates in short gamma-ray bursts", [pdf](#) Margutti, R., Chincarini, G., **Granot, J.**, Guidorzi, C., Berger, E., Bernardini, M. G., Gehrels, N., Soderberg, A. M., Stamitikos, M., & Zaninoni, E. 2011, MNRAS, **417**, 2144 – 2160
90. "Detection of High-Energy Emission during the X-ray Flaring Activity in GRB 100728A", [pdf](#) the Fermi LAT and Fermi GBM collaborations, 2011, ApJ Lett., **734**, L27
89. "The missing link: Merging neutron stars naturally produce jet-like structures and can power short Gamma-Ray Bursts", [pdf](#) Rezzolla, L., Giacomazzo, B., Baiotti, L., **Granot, J.**, Kouveliotou, C., & Aloy, M. A. 2011, ApJ Lett., **732**, L6
88. "Detailed radio view on two stellar explosions: XRF 080109 / SN 2008D and SN 2007uy in NGC 2770", [pdf](#) van der Horst, A. J., Kamble, A. P., Paragi, Z., Sage, L. J., Pal, S., Taylor, G. B., Kouveliotou, C., **Granot, J.**, Ramirez-Ruiz, E., Ishwara-Chandra, C. H., Oosterloo, T. A., Wijers, R. A. M. J., Wiersema, K., Strom, R. G., Bhattacharya, D., Rol, E., Starling, R. L. C., Curran, P. A., & Garrett, M. A. 2011, ApJ, **726**, 99 – 110
87. "Impulsive Acceleration of Strongly Magnetized Relativistic Flows", [pdf](#) **Granot, J.**, Komissarov, S. S., & Spitkovsky, A. 2011, MNRAS, **411**, 1323 – 1353
86. "Fermi Large Area Telescope Constraints on the gamma-ray Opacity of the Universe", [pdf](#) The Fermi LAT Collaboration, 2010, ApJ, **723**, 1082 – 1096
85. "Detection of a Spectral Break in the Extra Hard Component of GRB 090926A", [pdf](#) The Fermi LAT and Fermi GBM Collaborations, 2011, ApJ, **729**, 114
84. "Fermi observations of high-energy gamma-ray emission from GRB 090217A", [pdf](#) The Fermi LAT and Fermi GBM Collaborations, 2010, ApJ Lett., **717**, L127 – L132
83. "Fermi Observations of GRB 090510: A Short Hard Gamma-Ray Burst with an Additional, Hard Power-Law Component from 10 keV to GeV Energies", [pdf](#) The Fermi LAT and Fermi GBM Collaborations, 2010, ApJ, 716, 1178 – 1190 (**J. Granot** is a contact author)
82. "Discovery of a new Soft Gamma Repeater: SGR J0418+5729", van der Horst, A. J.,

- [pdf](#) Connaughton, V., Kouveliotou, C., Göğüs, E., Kaneko, Y., Wachter, S., Briggs, M. S., **Granot, J.**, Ramirez-Ruiz, E., Woods, P. M., Aptekar, R. L., Barthelmy, S. D., Cummings, J. R., Finger, M. H., Frederiks, D. D., Gehrels, N., Gelino, C. R., Gelino, D. M., Golenetskii, S., Hurley, K., Krimm, H. A., Mazets, E. P., McEnery, J. E., Meegan, C. A., Oleynik, P. P., Palmer, D. M., Pal'shin, V. D., Pe'er, A., Svinkin, D., Ulanov, M. V., van der Klis, M., von Kienlin, A., Watts, A. L., & Wilson-Hodge C. A. 2010, *ApJ Lett.*, **711**, L1 – L6
81. [pdf](#) "Magnetar Twists: Fermi/Gamma-ray Burst Monitor (GBM) detection of SGR J1550-5418", Kaneko, Y., Göğüs, E., Kouveliotou, C., **Granot, J.**, Ramirez-Ruiz, E., van der Horst, A. J., Watts, A. L., Finger, M. H., Gehrels, N., Pe'er, A., van der Klis, M., von Kienlin, A., Wachter, S., Wilson-Hodge, C. A., & Woods, P. M. 2010, *ApJ*, **710**, 1335 – 1342
80. [pdf](#) "A mildly relativistic radio jet from the normal Type Ic Supernova 2007gr", Paragi, Z., Taylor, G. B., Kouveliotou, C., **Granot, J.**, Ramirez-Ruiz, E., Bietenholz, M., van der Horst, A. J., Pidopryhora, Y., van Langevelde, H. J., Garrett, M. A. Szomoru, A., Argo, M., & Paczynski, B. 2010, *Nature*, 463, 516 – 518
79. [pdf](#) "Fermi Detection of Delayed GeV Emission from the Short Gamma-Ray Burst 081024B", The Fermi and Swift Collaborations, 2010, *ApJ*, **712**, 558 – 564
78. [pdf](#) "The long rapid decay phase of the extended emission from the short GRB080503", Genet, F., Butler, N. R., & **Granot, J.** 2010, *MNRAS*, **405**, 695 – 700
77. [pdf](#) "Swift and Fermi observations of the early afterglow of the short Gamma-Ray Burst 090510", The Swift and Fermi Collaborations, 2010, *ApJ Lett.*, **709**, L146 – L151
76. [pdf](#) "Fermi Observations of GRB 090902B: A Distinct Spectral Component in the Prompt and Delayed Emission", The Fermi and Swift collaborations, 2009, *ApJ Lett.*, **706**, L138 – L14
75. [pdf](#) "The spectral-temporal properties of the prompt pulses and rapid decay phase of GRBs", Willingale, R., Genet, F., **Granot, J.**, & O'Brien, P. T. 2010, *MNRAS*, **403**, 1296 – 1316
74. [pdf](#) "A limit on the variation of speed of light arising from quantum gravity effects", The Fermi LAT and Fermi GBM Collaborations, 2009, *Nature*, 462, 331 – 334 (**J. Granot** is a corresponding author; he initiated, organized and supervised this work and was the main driving force behind it; he would be first author if not for the Fermi LAT collaboration's strict alphabetical author list rule).
73. [pdf](#) "Realistic analytic model for the prompt and high-latitude emission in GRBs", Genet, F., & **Granot, J.** 2009, *MNRAS*, **399**, 1328 – 1346
72. [pdf](#) "A late time afterglow rebrightening in GRB081028", Margutti, R., Genet, F., **Granot, J.**, and 19 co-authors, 2009, *MNRAS*, **402**, 46 – 64
71. [pdf](#) "Fermi observations of high-energy gamma-ray emission from GRB 080825C", The Fermi LAT and Fermi GBM Collaborations, 2009, *ApJ*, **707**, 580 – 592 (**J. Granot** is a contact author)
70. [pdf](#) "Limits on radioactive-powered emission associated with a short-hard GRB 070724A in a star-forming galaxy", Kocevski, D., Thöne, C., Ramirez-Ruiz, E., Bloom, J. S., **Granot, J.**, Butler, N. R., Perley, D. A., Modjaz, M., Lee-Alardin, W. H., Cobb, B. E., Levan, A. J., & Covino, S. 2010, *MNRAS*, **404**, 963 – 974
69. [pdf](#) "Fermi observations of high-energy gamma-ray emission from GRB 080916C", The Fermi LAT and Fermi GBM Collaborations, 2009, *Science*, 323, 1688 – 1693
68. [pdf](#) "Rise and fall of the X-ray flash 080330: an off-axis jet?", Guidorzi, C., Clemens, S. Kobayashi, S., **Granot, J.**, and 30 other co-authors, 2009, *A&A*, **499**, 439 – 453
67. [pdf](#) "Prospects for GRB science with the Fermi Large Area Telescope", Band, D. L., Axelsson, M., Baldini, L., Barbiellini, G., Baring, M. G., Bastieri, D., Battelino, M., Bellazzini, R., Bissaldi, E., Bogaert, G., Bonnell, J., Chiang, J., Cohen-Tanugi, J., Connaughton, V., Cutini, S., de Palma, F., Dingus, B. L., do Couto e Silva, E., Fishman, G., Galli, A., Gehrels, N., Giglietto, N., **Granot, J.**, Guiriec, S., Hughes, R. E., Kamae, T., Komin, N., Kuehn, F., Kuss, M., Longo,

F., Lubrano, P., Kippen, R. M., Mazziotta, M. N., McEnery, J. E., McGlynn, S., Moretti, E., Nakamori, T., Norris, J. P., Ohno, M., Olivo, M., Omodei, N., Pelassa, V., Piron, F., Preece, R., Razzano, M., Russell, J. J., Ryde, F., Saz Parkinson, P. M., Scargle, J. D., Sgrò, C., Shimokawabe, T., Smith, P. D., Spandre, G., Spinelli, P., Stamatikos, M., Winer, B. L., & Yamazaki, R. 2009, *ApJ*, **701**, 1673–1694

66. ["Stability of Radiative Relativistic Shocks to Global Oscillations"](#),
[pdf](#) Königl, A., & **Granot, J.** 2008, *International Journal of Modern Physics D*, **17**, 1777–1786
65. ["Late time observations of GRB080319B: jet break, host galaxy and accompanying supernova"](#), Tanvir, N. R., Rol, Levan, A., Fruchter, A., **Granot, J.**, Svensson, K. M., O'Brien, P. T., Wiersema, K., Starling, R. L. C., Jakobsson, P., Fynbo, J., Hjorth, J., Curran, P., van der Horst, A. J., Kouveliotou, C., Racusin, J. L., Burrows, D. N., & Genet, F. 2010, *ApJ*, **725**, 625 – 632
64. ["GRB 080503: Implications of a Naked Short Gamma-Ray Burst Dominated by Extended Emission"](#), Perley, D. A., Metzger, B. D., **Granot, J.**, Butler, N. R., Sakamoto, T., Ramirez-Ruiz, E., Levan, A. J., Bloom, J. S., Miller, A. A., Bunker, A., Chen, H.-W., Filippenko, A. V., Gehrels, N., Glazebrook, K., Hall, P., Hurley, K. C., Kocevski, D., Li, W., Lopez, S., Norris, J., Piro, A. L., Poznanski, D., Prochaska, J. X., Quataert, E., & Tanvir, N. 2009, *ApJ*, **696**, 1871 – 1885
63. ["SN 2001em: Not so Fast"](#), Schinzel, F. K., Taylor, G. B., Stockdale, C. J., **Granot, J.** & E. Ramirez-Ruiz 2009, *ApJ*, **691**, 1380 – 1386
62. ["Analytic expressions for the surface brightness profile of gamma-ray burst afterglow images"](#),
[pdf](#) **Granot, J.** 2008, *MNRAS Lett.*, **390**, L46 – L50
61. ["GRB 080319B: A Naked-Eye Stellar Blast from the Distant Universe"](#),
[pdf](#) Racusin, J. L., Karpov, S. V., Sokolowski, M., **Granot, J.**, Wu, X. F., Pal'shin, V., Covino, S., van der Horst, A. J., Oates, S. R., Schady, P., Smith, R. J., Cummings, J., Starling, R. L. C., Piotrowski, L. W., Zhang, B., Evans, P. A., Holland, S. T., Malek, K., Page, M. T., Vetere, L., Margutti, R., Guidorzi, C., Kamble, A., Curran, P. A., Beardmore, A., Kouveliotou, C., Mankiewicz, L., Melandri, A., O'Brien, P. T., Page, K. L., Piran, T., Tanvir, N. R., Wrochna, G., Aptekar, R. L., Bartolini, C., Barthelmy, S., Beskin, G. M., Bondar, S., Campana, S., Cucchiara, A., Cwiok, M., D'Avanzo, P., D'Elia, V., Della Valle, M., Dominik, W., Falcone, A., Fiore, F., Fox, D. B., Frederiks, D. D., Fruchter, A. S., Fugazza, D., Garrett, M., Gehrels, N., Golenetskii, S., Gomboc, A., Greco, G., Guarnieri, A., Immler, S., Kasprovicz, G., Levan, A. J., Mazets, E. P., Molinari, E., Moretti, A., Nawrocki, K., Oleynik, P. P., Osborne, J. P., Pagani, C., Paragi, Z., Perri, M., Piccioni, A., Ramirez-Ruiz, E., Roming, P. W. A., Steele, I. A., Strom, R. G., Testa, V., Tosti, G., Ulanov, M. V., Wiersema, K., Wijers, R. A. M. J., Zarnecki, A. F., Zerbi, F., Mészáros, P., Chincarini, G., & Burrows, D. N. 2008, *Nature*, **455**, 183 – 188
60. ["An infrared ring around the magnetar SGR 1900+14"](#),
[pdf](#) Wachter, S., Ramirez-Ruiz, E. Dwarkadas, V. V., Kouveliotou, C., **Granot, J.**, Patel, S. K., & Figer, D. 2008, *Nature*, **453**, 626 – 628
59. ["Opacity Build-up in Impulsive Relativistic Sources"](#),
[pdf](#) **Granot, J.**, Cohen-Tanugi, J., & do Couto e Silva, E. 2008, *ApJ*, **677**, 92 – 126
58. ["Stirring the Embers: High Sensitivity VLBI Observations of GRB 030329"](#),
[pdf](#) Pihlström, Y. M., Taylor, G. B., **Granot, J.**, & Doeleman, S. 2007, *ApJ*, **664**, 411 – 415
57. ["GRB 060714: No Clear Dividing Line between Prompt Emission and X-ray Flares"](#),
[pdf](#) Krimm, H. A., **Granot, J.**, Marshal, F., Perri, M., Barthelmy, S. D., Burrows, D. N., Gehrels, N., Meszaros, P., & Morris, D. 2007, *ApJ*, **665**, 554 – 568
56. ["The flat decay phase in the early X-ray afterglows of Swift GRBs"](#),
[pdf](#) **Granot, J.** 2006, short review for the proceeding of the conference "Swift and GRBs: Unveiling the Relativistic Universe", held in Venice, Italy, June 5-9, 2006; *Il Nuovo Cimento B*, **121** (10-11), 1073 – 1079
55. ["A new gamma-ray burst classification scheme from GRB 060614"](#),
[pdf](#) Gehrels, N., Norris, J. P., Mangano, V., Barthelmy, S. D., Burrows, D. N., **Granot, J.**, Kaneko, Y., Kouveliotou, C., Markwardt, C. B., Meszaros, P., Nakar, E., Nousek, J. A., O'Brien, P. T., Page, M., Palmer, D. M., Parsons, A. M., Roming, P. W. A., Sakamoto, T., Sarazin, C. L., Schady, P., Stamatikos, M., & Woosley, S. E. 2006, *Nature*, **444**, 1044 – 1046

54. ["The Structure and Dynamics of GRB Jets"](#), **Granot, J.** 2007, invited review for the proceeding of the conferenc "Triggering Relativistic Jets", held in Cozumel, Mexico, on March 28 to April 1, 2005; *Revista Mexicana de Astronomia y Astrofisica*, **27**, 140 – 165
[pdf](#)
53. ["The Giant Flare from SGR 1806-20 and its Radio Afterglow"](#), Taylor, G. B., & **Granot, J.** 2006, invited Brief Review, *Mod. Phys. Lett. A*, Vol. **21**, No. 29, pp. 2171 – 2188
[pdf](#)
52. ["A Simple Test of the External Shock Model for the Prompt Emission in Gamma-Ray Bursts"](#), Ramirez-Ruiz, E., & **Granot, J.** 2007, *New Astronomy*, Volume **12**, Issue 8, pp. 630 – 634
[pdf](#)
51. ["Prompt and Afterglow Emission Properties of GRBs with Spectroscopically identified Supernovae"](#), Kaneko, Y., Ramirez-Ruiz, E., **Granot, J.**, Kouveliotou, C., Woosley, S. E., Patel, S. K., Rol, E., in't Zand, J. J. M., van der Horst, A. J., Wijers, R. A. M. J., & Strom, R. 2007, *ApJ*, **654**, 385 – 402
[pdf](#)
50. ["Smooth Light Curves from a Bumpy Ride: Relativistic Blast Wave Encounters a Density Jump"](#), Nakar, E., & **Granot, J.** 2007, *MNRAS*, **380**, 1744 – 1760
[pdf](#)
49. ["Revealing the Jet Structure of GRB 030329 with High Resolution Multicolor Photometry"](#), Gorosabel, J., Castro-Tirado, A. J., Ramirez-Ruiz, E., **Granot, J.**, Caon, N., Cairos, L. M., Rubio-Herrera, E., Guziy, S., de Ugarte Postigo, A., & Jelinek, M. 2006, *ApJ Lett.*, **641**, L13 – L16
[pdf](#)
48. ["Implications of the Early X-Ray Afterglow Observations of Swift GRBs"](#), **Granot, J.**, Königl, A., & Piran, T. 2006, *MNRAS*, **370**, 1946 – 1960
[pdf](#)
47. ["Distribution of Gamma-Ray Burst Ejecta Energy with Lorentz Factor"](#), **Granot, J.**, & Kumar, P. 2006, *MNRAS Lett.*, **366**, L13 – L16
[pdf](#)
46. ["The Galaxy Hosts and Large-Scale Environments of Short-Hard Gamma-Ray Bursts"](#), Prochaska, J. X., Bloom, J. S., Chen, H.-W., Foley, R. J., Perley, D. A., Ramirez-Ruiz, E., **Granot, J.**, Lee, W. H., Pooley, D., Alatalo, K., Hurley, K., Cooper, M. C., Dupree, A. K., Gerke, B. F., Hansen, B. M. S., Kalirai, J. S., Newman, J. A., Rich, R. M., Richer, H., Stanford, S. A., Stern, D., & van & van Breugel W. J. M. 2006, *ApJ*, **642**, 989 – 994
[pdf](#)
45. ["The Case for Anisotropic Afterglow Efficiency within GRB Jets"](#), Eichler, D., & **Granot, J.** 2006, *ApJ Lett.*, **641**, L5 – L8
[pdf](#)
44. ["Evidence for a Canonical GRB Afterglow Light Curve in the *Swift* XRT Data"](#), Nousek, J. A., Kouveliotou, C., Grupe, D., Page, K., **Granot, J.**, Ramirez-Ruiz, E., Patel, S., Burrows, D. N., Mangano, V., Barthelmy, S., Beardmore, A. P., Campana, S., Capalbi, M., Chincarini, G., Cusumano, G., Falcone, A. D., Gehrels, N., Giommi, P., Goad, M., Godet, O., Hurkett, C., Kennea, J. A., Moretti, A., O'Brien, P., Osborne, J., Romano, P., Tagliaferri, G., & Wells, A. 2006, *ApJ*, **642**, 389 – 400
[pdf](#)
43. ["Constraints on Short Gamma-Ray Burst Models with Optical Limits of GRB 050509b"](#), Hjorth, J., Sollerman, J., Gorosabel, J., **Granot, J.**, Klose, S., Kouveliotou, C., Melinder, J., Ramirez-Ruiz, E., Starling, R., Thomsen, B., Andersen, M. I., Fynbo, J. P. U., Jensen, B. L., Vreeswijk, P.M., Castro Cerón, J. M., Jakobsson, P., Levan, E., Pedersen, K., Rhoads, J. E., Tanvir, N. R., Watson, D., & Wijers, R. A. M. J. 2005, *ApJ Lett.*, **630**, L117 – L120
[pdf](#)
42. ["A Compact Binary Merger Model for GRB 050509b"](#), Lee, W. H., Ramirez-Ruiz, E., & **Granot, J.** 2005, *ApJ Lett.*, **630**, L165 – L168
[pdf](#)
41. ["Closing in on a Short-Hard Burst Progenitor: Constraints from Early-Time Optical Imaging and Spectroscopy of a Possible Host Galaxy of GRB 050509b"](#), Bloom, J. S., Prochaska, J. X., Pooley, D., Blake, C. W., Foley, R. J., Jha, S., Ramirez-Ruiz, E., **Granot, J.**, Filippenko, A. V., Sigurdsson, S., Barth, A. J., Chen, H.-W., Cooper, M. C., Falco, E. E., Gal, R. R., Gerke, B. F., Gladders, M. D., Greene, J. E., Hennanwi, J., Ho, L. C., Hurley, K., Koester, B. P., Li, W., Lubin, L., Newman, J., Perley, D. A., Squires, G. K., & Wood-Vasey, W. M. 2006, *ApJ*, **638**, 354 – 368
[pdf](#)
40. ["The Growth, Polarization, and Motion of the Radio Afterglow from the Giant Flare from SGR 1806-20"](#), Taylor, G. B., Gelfand, J. D., Gaensler, B. M., **Granot, J.**, Kouveliotou, C., Fender, R. P., Ramirez-Ruiz, E., Eichler, D., Lyubarsky, Y. E., Garrett, M., & Wijers, R. A. M. J. 2005, *ApJ Lett.*, **634**, L93 – L96
[pdf](#)

39. ["Afterglow Light Curves from Impulsive Relativistic Jets with an Unconventional Structure"](#),
[pdf](#) **Granot, J.** 2005, *ApJ*, **631**, 1022 – 1031
38. ["Diagnosing the Outflow from the SGR 1806-20 Giant Flare with Radio Observations"](#),
[pdf](#) **Granot, J.**, Ramirez-Ruiz, E., Taylor, G. B., Eichler, D., Lyubarsky, Y. E., Wijers, R. A. M. J., Gaensler, B. M., Gelfand, J. D., & Kouveliotou, C. 2006, *ApJ*, **638**, 391 – 396
37. ["A Re-brightening of the Radio Nebula associated with the 2004 Dec. 27 Giant Flare from SGR 1806-20"](#), Gelfand, J. D., Lyubarsky, Y. E., Eichler, D., Gaensler, B. M., Taylor, G. B., **Granot, J.**, Newton-McGee, K. J., Ramirez-Ruiz, E., Kouveliotou, C., & Wijers, R. A. M. J. 2005, *ApJ Lett.*, **634**, L89 – L92
36. ["Gamma-Ray Observations of a Giant Flare from the Magnetar SGR 1806-20"](#),
[pdf](#) Palmer, D. M., Barthelmy, S., Gehrels, N., Kippen, R. M., Cayton, T., Kouveliotou, C., Eichler, D., Wijers, R. A. M. J., Woods, P. M., **Granot, J.**, Lyubarsky, Y. E., Ramirez-Ruiz, E., Barbier, L., Chester, M., Cummings, J., Fenimore, E. E., Finger, M. H., Gaensler, B. M., Hullinger, D., Krimm, H., Markwardt, C. B., Nousek, J. A., Parsons, A., Patel, S., Sakamoto, T., Sato, G., Suzuki, M., & Tueller, J. 2005, *Nature*, 434, 1107 – 1109
35. ["An Expanding Radio Nebula Produced by the Giant Flare from the Magnetar SGR 1806-20"](#),
[pdf](#) Gaensler, B. M., Kouveliotou, C., Gelfand, J. D., Taylor, G. B., Eichler, D., Wijers, R. A. M. J., **Granot, J.**, Ramirez-Ruiz, E., Lyubarsky, Y. E., Hunstead, R. W., Campbell-Wilson, D., van der Host, A. J., McLaughlin, M. A., Fender, R. P., Garrett, M. A., Newton-McGee, K. J., Palmer, D. M., Gehrels, N., & Woods, P. M. 2005, *Nature*, 434, 1104 – 1106
34. ["Afterglow Observations Shed New Light on the Nature of X-Ray Flashes"](#),
[pdf](#) **Granot, J.**, Ramirez-Ruiz, E., & Perna, R. 2005, *ApJ*, **630**, 1003 – 1014
33. ["Radio Flares and the Magnetic Field Structure in GRB Outflows"](#),
[pdf](#) **Granot, J.**, & Taylor, G. B. 2005, *ApJ*, **625**, 263 – 270
32. ["An Off-Axis Model for GRB 031203"](#), Ramirez-Ruiz, E., **Granot, J.**, Kouveliotou, C., Woosley, S. E., Patel, S. K., & Mazzali, P.A. 2005, *ApJ*, **625**, L91
31. ["Two Component Jet Models of Gamma-Ray Burst Sources"](#),
[pdf](#) Peng, F., Königl, A. & **Granot, J.** 2005, *ApJ*, **626**, 966 – 977
30. ["Implications of the Measured Image Size for the Radio Afterglow of GRB 030329"](#),
[pdf](#) **Granot, J.**, Ramirez-Ruiz, E. & Loeb, A. 2005, *ApJ*, **618**, 413 – 425
29. ["Constraining the Structure of GRB Jets through the log\(N\)-log\(S\) Distribution"](#),
[pdf](#) Guetta, D., **Granot, J.**, & Begelman, M. C. 2005, *ApJ*, **622**, 482 – 491
28. ["The Case for a Misaligned Relativistic Jet from SN 2001em"](#),
[pdf](#) **Granot, J.**, & Ramirez-Ruiz, E. 2004, *ApJ Lett.*, **609**, L9 – L12
27. ["High Energy Emission from the Double Pulsar System J0737-3039"](#),
[pdf](#) **Granot, J.**, & Mészáros, P. 2004, *ApJ Lett.*, **609**, L17 – L20
26. ["Testing the Predictions of the Universal Structured GRB Jet Model"](#),
[pdf](#) Nakar, E., **Granot, J.**, & Guetta, D. 2004, *ApJ Lett.*, **606**, L37 – L40
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[pdf](#) **Granot, J.**, & Guetta, D. 2003, *ApJ Lett.*, **598**, L11 – L14
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[pdf](#) **Granot, J.** 2003, *ApJ Lett.*, **596**, L17 – L21
23. ["Radio Imaging of GRB Jets in Nearby Supernovae"](#),
[pdf](#) **Granot, J.**, & Loeb, A. 2003, *ApJ Lett.*, **593**, L81 – L84
22. ["Refreshed Shocks from a Gamma-Ray Burst"](#),
[pdf](#) **Granot, J.**, Nakar, E., & Piran, T. 2003, *Nature*, 426, 138 – 139

21. ["Linear Polarization in Gamma-Ray Bursts: The Case for an Ordered Magnetic Field"](#), **Granot, J.**, & Königl, A. 2003, ApJ Lett., **594**, L83 – L87
20. ["Constraining the Structure of Gamma-Ray Burst Jets through the Afterglow Light Curves"](#), **Granot, J.**, & Kumar, P., 2003, ApJ, **591**, 1086 – 1096
19. ["The Evolution of a Structured Relativistic Jet and Gamma-Ray Burst Afterglow Light Curves"](#), **Granot, J.**, & Kumar, P., 2003, ApJ, **591**, 1075 – 1085
18. ["Neutrinos of Energy \$\sim 10^{16}\$ eV from GRBs in Pulsar Wind Bubbles"](#), **Granot, J.**, & Guetta, D., 2003, **Phys. Rev. Lett.**, 90, 201103
17. ["Neutrinos from Pulsar Wind Bubbles as Precursors to Gamma-Ray Bursts"](#), **Granot, J.**, & Guetta, D. 2003, **Phys. Rev. Lett.**, 90, 191102
16. ["High-Energy Emission from the Prompt Gamma-Ray Burst"](#), **Granot, J.**, & Guetta, D., 2003, ApJ, **585**, 885 – 889
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14. ["The Mean Number of Extra Microimage Pairs for Macrolensed Quasars"](#), **Granot, J.**, Schechter, P. L., & Wambsganss, J. 2003, ApJ, **583**, 575 – 583
13. ["Variability in GRB afterglows and GRB 021004"](#), **Granot, J.**, Nakar, E., Piran, T., & 2003, New Astronomy, **8**, 495 – 505
12. ["The Detectability of Orphan Afterglows"](#), **Granot, J.**, Nakar, E., Piran, T., & 2002, ApJ, **579**, 699 – 705
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10. ["Off-Axis Afterglow Emission from Jetted Gamma-Ray Bursts"](#), **Granot, J.**, Panaitescu, A., Kumar, P., & Woosley, S. E. 2002, ApJ Lett., **570**, L61 – L64
9. ["The Shape of Spectral Breaks in Gamma-Ray Burst Afterglows"](#), **Granot, J.**, & Sari, R. 2002, ApJ, **568**, 820 – 829
8. ["Microlensing and the Surface Brightness Profile of the Afterglow Image of GRB 000301C"](#), **Granot, J.**, Gaudi, B. S., & Loeb, A. 2001, ApJ, **561**, 178 – 182
7. ["Radiative Hydromagnetic Shocks in Relativistic Outflow Sources"](#), **Granot, J.**, & Königl, A. 2001, ApJ, **560**, 145 – 159
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