

## Jonathan Granot \_\_\_\_\_ Curriculum Vitae

Astrophysics Research Center of the Open university & Department of Natural Sciences  
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### EDUCATION \_\_\_\_\_

- 2002      **Ph.D.** in Physics, Hebrew University of Jerusalem  
1999      **M.Sc.** in Physics, Hebrew University of Jerusalem  
1997      **B.Sc.** in Physics and Mathematics, Hebrew University of Jerusalem

### POSITIONS HELD \_\_\_\_\_

- 2017 –      Research Professor of Physics, George Washington University  
2016 –      Full Professor, Open University of Israel  
2012 – 2016      Associate Professor, Open University of Israel  
2008 – 2012      Reader in Astrophysics, University of Hertfordshire  
2007 – 2008      Principal Lecturer, University of Hertfordshire  
2004 – 2007      Research Associate, KIPAC, Stanford  
2001 – 2004      Member, Institute for Advanced Study (IAS), Princeton

### VISITING POSITIONS \_\_\_\_\_

- Long term:    2011 – 2012    Erskine Visiting Associate Professor, Hebrew University  
Short term:    2008, 09, 14    KIPAC, Stanford & University of California, Santa Cruz  
                  2006            Kavli Institute for Theoretical Physics, Santa Barbara  
                  2000            Kersten Visiting Fellow, University of Chicago

### HONORS, PRIZES, AWARDS \_\_\_\_\_

- 2011      HEAD AAS Rossi Prize to B. Atwood, P. Michelson & the Fermi LAT team  
2007      Royal Society Wolfson Research Merit Award (for 5 years;  
                  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  
2000      The Giulio Racah prize for academic excellence  
1999      M.Sc. *cum laude* in Physics (Hebrew University)  
1997      B.Sc. *cum laude* in Physics and Mathematics (Hebrew Univ.)  
1995,6    Dean's list of the Faculty of Mathematics and Natural Sciences

### RESEARCH INTERESTS \_\_\_\_\_

- High energy astrophysics; gamma-ray bursts; magnetars; gravitational lensing; high energy neutrinos; pulsar wind nebulae; relativistic fluid dynamics and MHD; structure of blast waves; dynamics of relativistic jets; tests of Lorentz invariance violation.

## SELECT ACADEMIC ACHIEVEMENTS \_\_\_\_\_

- ★ **177** papers published in refereed journals; **7** review articles; **2** book chapters
- ★ **>60** invited talks at conferences/meetings (and **>60** colloquia/seminars)
- ★ Over **15,000** citations (H-index of **62**; SAO/NASA Astrophysics Data System)

## PROFESSIONAL ACTIVITY \_\_\_\_\_

- Peer Review for: Nature, Science Magazine; Nature Astronomy; Nature Physics; Phys. Rev. (Letters; D; E); ApJ (Letters; main J.); MNRAS (Letters; main J.); Astron. & Astrophys.; Rep. Prog. Phys.; JHEAP; Adv. in Space Res.; Astroparticle Physics; PASJ; JCAP; Rev. Mex. A&A; ASTRA; IJMPCS; NJP; PASA
- Review of proposals for: NASA (+panel); NSF (+panel); ERC; DFG; European Science Foundation (ESF); US-Israel Binational Science Foundation (BSF); Israel Science Foundation (ISF); STFC; SNS; Aristeia; WHT; Gemini Observatory; GMRT
- Member of Alon Scholarships Panel (for the Integration of Outstanding Faculty in Israel)
- Co-I in VLBA, VLA, VLT, EVN, WSRT, Chandra, Spitzer, and Hubble Space Telescope proposals, and 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 the **Cherenkov Telescope Array** Consortium 2008–

## SELECT PERSONAL RESEARCH FUNDING \_\_\_\_\_

- 2019–2023: ISF – NSFC joint research program (NIS 1,050,000)
- 2014–2019: Israel Science Foundation (ISF; with Yuri Lyubarsky;  $\frac{1}{2} \times$  NIS 1,030,000)
- 2007–2012: Royal Society Wolfson Research Merit Award (£ 18,000)
- 2007–2011: Marie Curie International Reintegration Grant (€ 100,000)

## TEACHING AND MENTORING EXPERIENCE \_\_\_\_\_

- Head of the Physics Program at the Open University of Israel (2017-)
- Developing and updating courses in Physics at the Open University of Israel (2012-)
- Taught courses in astrophysics, physics, mathematics, programming (2007 – 2011)
- Mentoring & guiding PhD students and postdocs (at Princeton, Stanford, Hebrew U.); supervising postdocs (at U. of Hertfordshire, Open U. of Israel)
- Gave tutorial talks at summer schools and review talks at conferences
- Worked as a teaching assistant (1996 – 1998) and physics lab instructor (1998 – 2001)

## INVITED TALKS

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63. “Relativistic Accelerators: Gamma-Ray Bursts”, invited review talk at the conference “PASTO - Particle Acceleration in Astrophysical Objects”, September 7, 2022, Frascati, Rome, Italy
62. “Gamma-Ray Burst Polarization: Status and Perspectives”, invited review talk at the conference “Astrophysical Polarimetry in the Time-Domain Era”, September 1, 2022, Lecco, Italy
61. “GRB Jets from Compact Binary Mergers in the Era of Gravitational Wave Astronomy”, invited talk at the conference “Astrophysics in the Next Decade: From the First Stars to Intelligent Life”, a meeting in celebration of Avi Loeb’s 60th birthday, June 7, 2022, Martha’s Vineyard, MA, USA
60. “Binary neutron star mergers - insights from multi-messenger observations”, invited review talk at the conference “Growing Black Holes: Accretion and Mergers”, May 18, 2022, Kathmandu, Nepal
59. “High-Energy Emission from GRBs: Theoretical Perspectives”, invited talk at the 16<sup>th</sup> Marcel Grossmann meeting (MG16), July 7, 2021, Online

### COVID-19 PANDEMIC (HARDLY ANY INTERNATIONAL CONFERENCES)

58. “Polarization in Gamma-Ray Bursts”, invited talk at workshop to bring together experts on High Energy Astrophysics from Japan and Israel, 22 July 2019, RIKEN, Kobe, Hyogo, Japan
57. “Polarization in Gamma-Ray Bursts”, invited talk at the conference “Gamma-Ray Bursts and Related Astrophysics in Multi-Messenger Era”, May 13, 2019, Nanjing, China
56. “Lessons from GW170817 / GRB170817A”, invited talk at the workshop “Multi-Wavelength Survey and Time-Domain Astronomy” May 10, 2019, Shanghai, China
55. “GRB Afterglow Polarization and GRB170817A / GW170817”, invited talk at the 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 “Exploring the Universe: Near Earth Space Science to Extra-Galactic Astronomy” (a tribute to S. N. Bose’s 125th birth anniversary), Nov.15, 2018, Kolkata, India
53. “GeV Emission from GRBs: New Perspectives from *Fermi*”, invited talk at the 15<sup>th</sup> Marcel Grossmann meeting (MG15), July 6, 2018, Rome, Italy

52. “The Bright and the Slow – GRBs 100724B & 160509A with high-energy cutoffs at  $\lesssim 100$  MeV”, invited talk at the 15<sup>th</sup> 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 3<sup>rd</sup> PANDA Symposium on Time Domain Astronomy & 1<sup>st</sup> results from Insight-HXMT; June 19, 2018, Chengdu, China
50. “Magnetic Fields in Gamma-Ray Bursts”, invited review talk at the conference “Deciphering the Violent Universe”, December 14, 2017, Playa del Carmen, Mexico
49. “Late Time GRB Radio Emission: Calorimetry & Identifying Orphan Afterglows”, “Radio Emission from NS-NS/BH Mergers”, 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”, “Prompt GRB Emission: Spectra & Polarization”, 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 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”, “Emission and Detectability of Magnetar Wind Nebulae”, “Evolution of Magnetars”, invited talks at the 2<sup>nd</sup> Capitol Chats, on “Magnetars, what are they? ”, July 13–15, 2016, GWU, Washington DC, USA
45. “Bounds on Lorentz Invariance Violation from Fermi GRBs”, review talk at the 17<sup>th</sup> Lomonosov Conference on Elementary Particle Physics, 22/8/15, Moscow, Russia
44. “Jet in Star”, “Magnetic acceleration of GRB jets”, “GRB130427A: evidence for genuine violation of  $E_{\text{syn,max}}$ ”, at *The 1<sup>st</sup> 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”, plenary review talk at the 5<sup>th</sup> Fermi Symposium, October 23, 2014, Nagoya, Japan
42. “Experimental Bounds on Quantum Gravity from Fermi GRB Observations”, review talk at “Experimental search for quantum gravity”, 3/9/14, SISSA, Trieste, Italy
41. “Jet acceleration, collimation and Stability”, at *The Strongest Magnetic Fields in the Universe*, Feb. 6, 2014, International Space Science Institute, Bern, Switzerland
40. “GRB Jet Dynamics”, invited review talk at *Future Directions of Relativistic Jets*, 31/8/2013, Skokloster, Sweden

39. “Searches for Quantum Gravity Signals using Gamma-Ray Bursts” invited talk at the conference *LOOPS 13*, July 23, 2013, Perimeter Institute, Waterloo, Canada
38. “GRB Jets: a Theoretical Review”, invited review talk at the workshop *Locating Astrophysical Transients*, May 15, 2013, Lorentz Center, Leiden, The Netherlands
37. “GRB Prompt Emission Mechanism: Implications of Fermi Observations”, invited talk at the 13<sup>th</sup> HEAD meeting, April 10, 2013, Monterey, California, USA
36. “Constraining Quantum Gravity with GRBs”, at *Experimental Search for Quantum Gravity: the hard facts*, October 24/10/12, Perimeter Institute, Waterloo, Canada
35. “GRB Jet Dynamics: Analytic Models and Numerical Simulations”, invited talk at the *Fall 2012 Gamma-Ray Burst Symposium*, 9/10/12, Marbella, Malaga, Spain
34. “Magnetic Field Decay in Magnetars and implications for evolutionary links”, invited talk at the 39<sup>th</sup> COSPAR Scientific Assembly, July 19, 2012, Mysore, India
33. “GRB Jet Dynamics and Afterglow Lightcurves”, invited talk at the 13<sup>th</sup> Marcel Grossmann meeting (MG13), July 6, 2012, Stockholm, Sweden
32. “Magnetized Relativistic Outflows: effects of strong time dependence”, invited talk at the 13<sup>th</sup> Marcel Grossmann meeting (MG13), July 5, 2012, Stockholm, Sweden
31. “GRBs: Current Status & Future Prospects”, review talk at the International Conference on Astrophysics & Cosmology (ICAC2012), 20/3/12, Kathmandu, Nepal
30. “What we could learn from Cherenkov Telescope Array observations of GRBs”, invited talk at the 12<sup>th</sup> HEAD meeting, 7/9/11, Newport, Rhode Island, USA
29. “Constraints on Lorentz Invariance Violation from Fermi”, invited talk at the *First LINK Workshop: Probing physics beyond the Standard Model with CTA*, November 12, 2010, Oxford, UK
28. “GRB theory in the Fermi Era”, invited talk at the conference *Accretion and Outflow in Black Hole Systems*, October 15, 2010, Kathmandu, Nepal
27. “Current Status and Future Prospects of GRB Science”, invited review talk at the RAS special discussion meeting *Explosive Transients*, June 18, 2010, Liverpool, UK
26. “Limits on Lorentz Invariance Violation from Fermi GRBs”, invited talk at the 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* meeting, April 14, 2010, Glasgow, Scotland
24. “Highlights from Fermi Gamma-Ray Space Telescope observations of GRBs”, invited talk at the “April” 2010 Meeting of the APS, 14/2/10, Washington, DC

23. “High-Energy Fermi GRBs, Long and Short”, invited talk at the 215<sup>th</sup> 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, Venice, Italy
21. “GRB High-Energy Emission: First Year Highlights from Fermi”, invited talk at *Particle Acceleration in Astrophysical Plasmas*, 17/8/09, KITP, Santa Barbara, CA
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 44<sup>th</sup> Rencontres de Moriond on *Very High Energy Phenomena in the Universe*, February 2, 2009, La Thuile, Italy
17. “Gamma-Ray Bursts and High Energy Astrophysics”, invited talk at the STFC summer school for new research students in astronomy, Sep. 2, 2008, Hatfield, 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*, 21/3/07, Amsterdam, The Netherlands
14. “Theory of GRB Afterglows”, invited talk at the conference *Circumstellar Media and Late Stages of Massive Stellar Evolution*, September 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. “Magnetar-GRB Connection & SGR 1806-20 Giant Flare”, 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 *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”, Feb. 6, 2006, KITP, Santa Barbara, CA, USA
9. “Probing the Magnetic Field Structure in GRBs via Polarization Measurements” invited talk at the mini-conference on “Astrophysical Explosions: from Engines to Remnants”, 47th Annual Meeting of DPP, APS, Oct. 25, 2005, Denver, CO, USA
8. “Physics of GRB Jets”, invited lecture 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 lecture at the summer school “Gamma-Ray Bursts: the First Three Hours”, given on behalf of Prof. Roger Blandford, August 29, 2005, Santorini, Greece
6. “The Structure and Dynamics of GRB Jets”, invited talk at the program *Physics of Astrophysical Outflows and Accretion Disks*, 12/3/05, KITP, Santa Barbara, CA
5. “Jets in Gamma-Ray Bursts”, invited talk at the conference “Triggering Relativistic Jets”, April 1, 2005, Cozumel, Mexico
4. “Radio Flares and the Magnetic Field Structure in GRB Outflows”, invited talk at the 22<sup>nd</sup> Texas Symposium on Relativistic Astrophysics, December 15, 2004, Stanford University, CA, USA
3. “X-ray and Gamma-Ray Polarization in Gamma-Ray Bursts”, invited talk at the workshop “X-ray Polarimetry”, February 10, 2004, SLAC, Stanford, CA, USA
2. “Some Theoretical Implications of Recent GRB Observations”, invited talk at the 10<sup>th</sup> Marcel Grossmann meeting on general relativity, 25/7/03, Rio de Janeiro, Brazil
1. “GRB Jets and Orphan Afterglows”, invited talk in “Gamma Ray Bursts: the Brightest Explosions in the Universe” the Second Harvard-Smithsonian Conference on Theoretical Astrophysics, May 22, 2002, Cambridge, MA, USA

## LIST OF PUBLICATIONS

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Articles **published in refereed journals** are marked by ‘\*’

Articles **submitted** to refereed journals but not yet published are marked by ‘o’

### Magnetized Relativistic Jets: Dynamics, Dissipation, Radiation

1. \* “GRB Spectrum from Gradual Dissipation in a Magnetized Outflow”, Gill, R., **Granot, J.**, & Beniamini, P. 2020, *MNRAS*, 499, 1356–1372
2. \* “The Effect of Pair Cascades on the High-Energy Spectral Cutoff in Gamma-Ray Bursts”, Gill, R., & **Granot, J.** 2018, *MNRAS Lett.*, 475, L1–L5
3. \* “2D Relativistic MHD Simulations of the Kruskal-Schwarzschild Instability in a Relativistic Striped Wind”, Gill, R., **Granot, J.**, & Lyubarsky, Y. 2018, *MNRAS*, 474, 3535–3546
4. \* “GRBs from Magnetic Reconnection: Variability and Robustness of Lightcurves”, **Granot, J.** 2016, *ApJ Lett.*, 816, L20 (6 pages)
5. \* “Properties of GRB Lightcurves from Magnetic Reconnection”, Beniamini, P., & **Granot, J.** 2016, *MNRAS*, 459, 3635–3658
6. \* “GRBs as Sources of Strong Magnetic Fields”, **Granot, J.**, Piran, T., Bromberg, O., Racusin, J. L., & Daigne, F. 2015, invited topical review (book chapter) in “The Strongest Magnetic Fields in the Universe” (Space Science Series, ISSI, Springer), *Space Science Reviews*, 191, 471–518
7. \* “The effects of sub-shells in highly magnetized relativistic flows”, **Granot, J.** 2012b, *MNRAS*, 421, 2467–2477
8. \* “Interaction of a highly magnetized impulsive relativistic flow with an external medium”, **Granot, J.** 2012a, *MNRAS*, 421, 2442–2466
9. \* “Impulsive Acceleration of Strongly Magnetized Relativistic Flows”, **Granot, J.**, Komissarov, S. S., & Spitkovsky, A. 2011, *MNRAS*, 411, 1323–1353
10. \* “Opacity Build-up in Impulsive Relativistic Sources”, **Granot, J.**, Cohen-Tanugi, J., & do Couto e Silva, E. 2008, *ApJ*, 677, 92–126

### Structure and Stability of Relativistic Shocks

11. \* “Stability of Radiative Relativistic Shocks to Global Oscillations”, Königl, A., & **Granot, J.** 2008, *International Journal of Modern Physics D*, 17, 1777–1786
12. \* “Radiative Hydromagnetic Shocks in Relativistic Outflow Sources”, **Granot, J.**, & Königl, A. 2001, *ApJ*, 560, 145–159



## Fundamental Physics: Astrophysical Tests of Lorentz Invariance

13. \* “A Planck-scale limit on spacetime fuzziness and stochastic Lorentz invariance violation”, Vasileiou, V., **Granot, J.**, Piran, T., & Amelino-Camelia, G. 2015, **Nature Physics**, 11, 344–346
14. \* “Lorentz Invariance Violation: latest Fermi results and GRB/AGN complementarity”, Bolmont, J., *et al.* 2014 (**J. Granot** author 6 of 9), **NIMPA**, **742**, 165
15. \* “Constraints on Lorentz Invariance Violation from Fermi/LAT Observations of GRBs”, Vasileiou, V. *et al.* 2013 (**J. Granot** author 6 out of 9), **PRD**, **87**, 122001
16. \* “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).

## Polarization in GRBs

17. \* “GRB Polarization: A Unique Probe of GRB Physics”, Gill, R., Kole, M., & **Granot, J.** 2021, **Galaxies**, **9**, 82 (78 pages); invited review article in the special issue ‘Gamma-Ray Burst Science in 2030’
18. \* “Temporal Evolution of Prompt GRB Polarization”, Gill, R., & **Granot, J.** 2021, **MNRAS**, **504**, 1939–1958
19. \* “Constraints on the Magnetic Field Structure in Collisionless Relativistic Shocks with a Radio Afterglow Polarization Upper Limit in GW170817”, Gill, R., & **Granot, J.** 2020, **MNRAS**, **491**, 5815–5825
20. \* “ALMA Detection of a Linearly Polarized Reverse Shock in GRB 190114C”, Laskar, T., *et al.* 2019 (**Granot J.** author #4 of 14) **ApJ Lett.**, 878, L26 (8 pp.)
21. \* “Linear polarization in gamma-ray burst prompt emission”, Gill, R., **Granot, J.**, & Kumar, P. 2020, **MNRAS**, **491**, 3343–3373
22. \* “Observatory science with eXTP”, in’t Zand, J. J. M., *et al.* 2019, **SCPMA**, **62**, 029506 (42 pages)
23. \* “Radio Flares and the Magnetic Field Structure in GRB Outflows”, **Granot, J.**, & Taylor, G. B. 2005, **ApJ**, **625**, 263–270
24. \* “The Most Probable Cause for the High Gamma-Ray Polarization in GRB 021206”, **Granot, J.** 2003, **ApJ Lett.**, 596, L17–L21
25. \* “Linear Polarization in GRBs: The Case for an Ordered Magnetic Field”, **Granot, J.**, & Königl, A. 2003, **ApJ Lett.**, 594, L83–L87

## Highly Magnetized Neutron Stars: Phenomenology, Theory

26. \* “Spectral modification of magnetar flares by resonant cyclotron scattering”, Yamasaki, S., Lyubarsky, Y., **Granot, J.**, & Göğüş, E. 2020, MNRAS, **498**, 484–494
27. \* “The Sleeping Monster: NuSTAR observations of SGR 1806–20, 11 years after the Giant Flare”, Younes, G. A., et al. 2017, ApJ, **851**, 17 (8 pages)
28. \* “X-ray and Radio Observations of the Magnetar J1935+2154 During its 2014, 2015, and 2016 Outbursts”, Younes, G. A., et al. 2017 (**J. Granot** author #11 out of 13), ApJ, **847**, 85 (15 pages)
29. \* “Burst and Outburst Characteristics of Magnetar 4U 0142+61”, Göğüş, E., et al. 2017 (**J. Granot** author #7 out of 13) ApJ, **835**, 68 (8 pages)
30. \* “The High Frequency Radio Emission of the Galactic Center Magnetar SGR J1745 – 29 during a Transitional Period”, Gelfand, J., et al. 2017 (**J. Granot** author #4 out of 9), ApJ, 850, 53 (7 pages)
31. \* “Learning About the Magnetar Swift J1834.9 – 0846 from its Wind Nebula”, **Granot, J.**, Gill, R., Younes, G., Gelfand, J., Harding, A., Kouveliotou, C., & Baring, M. G. 2017, MNRAS, **464**, 4895–4926
32. \* “Detection of Very Low Frequency Quasi-Periodic Oscillations in the 2015 Outburst of V404 Cygni ”, Huppenkothen, D., *et al.* 2017 (**J. Granot** author #11 out of 15), ApJ, **834**, 90 (17 pages)
33. \* “The wind nebula around magnetar Swift J1834.9 – 0846”, Younes, G., *et al.* 2016 (**J. Granot** author #5 out of 15) , ApJ, 824, 138 (12 pages)
34. \* “Five Year Fermi/GBM Magnetar Burst Catalog”, Collazzi, A. C., *et al.* 2015 (**J. Granot** author #8 out of 21), ApJS, **218**, 11 (30 pages)
35. \* “Quasi-Periodic Oscillations in Short Recurring Bursts of SGR J1550–5418”, Huppenkothen, D., *et al.* 2014 (**J. Granot** author 10 of 14), ApJ, **787**, 128 (13 pp.)
36. \* “Time Resolved Spectroscopy of SGR J1550–5418 for the Fermi/GBM Bursts”, Younes, G., *et al.* 2014 (**J. Granot** author #5 out of 19), ApJ, **785**, 52 (11 pages)
37. \* “Quasi-Periodic Oscillations and Broadband Variability in Short Magnetar Bursts”, Huppenkothen, D., *et al.* 2013 (**J. Granot** author #8 of 10), ApJ, **768**, 87 (25 pages)
38. \* “Detection of spectral evolution in the bursts emitted during the 2008–2009 active episode of SGR J1550-5418”, von Kienlin, A., et al. 2012 (**J. Granot** author #4 out of 19), ApJ, **755**, 150 (11 pages)
39. \* “Broadband Spectroscopy of SGR J1550-5418 Bursts”, Lin, L., *et al.* 2012 (**J. Granot** author #4 out of 12), ApJ, **756**, 54 (12 pages)
40. \* “Magnetic Field Decay in Neutron Stars: from SGRs to Weak Field Magnetars”, Dall’Osso, S., **Granot, J.**, & Piran, T. 2012, MNRAS, **422**, 2878–2903

41. \* “SGR J1550–5418 Bursts during its Most Prolific Activity observed with Fermi/GBM”, van der Horst, A. J., *et al.* 2012 (**J. Granot** author #8 of 37), *ApJ*, **749**, 122 (12 pages)
42. \* “Burst and Persistent Emission Properties during the Recent Active Episode of the Anomalous X-ray Pulsar 1E 1841-045”, Lin, L., *et al.* 2011 (**J. Granot** author #10 out of 18), **ApJ Lett.**, 740, L16 (6 pages)
43. \* “Fermi/GBM Observations of SGRJ0501+4516 Bursts”, Lin, L., *et al.* 2011 (**J. Granot** author #10 out of 30), *ApJ*, **739**, 87 (16 pages)
44. \* “Discovery of a New Soft Gamma Repeater: SGR J0418+5729”, van der Horst, A. J., *et al.* 2010 (**J. Granot** author #8 out of 35) **ApJ Lett.**, 711, L1–L6
45. \* “Magnetar Twists: Fermi/Gamma-ray Burst Monitor detection of SGR1550–5418”, Kaneko, Y., *et al.* 2010 (**J. Granot** author #4 out of 14) *ApJ*, **710**, 1335–1342
46. \* “An infrared ring around the magnetar SGR 1900+14”, Wachter, S., *et al.* 2008 (**J. Granot** author #5 out of 7), **Nature**, 453, 626–628
47. \* “The Giant Flare from SGR 1806–20 and its Radio Afterglow”, Taylor, G. B., & **Granot, J.** 2006, **invited Brief Review, Mod. Phys. Lett. A**, 21, 2171–2188
48. \* “Diagnosing the Outflow from the SGR 1806-20 Giant Flare with Radio Observations”, **Granot, J.**, and 8 other co-authors, 2006, *ApJ*, **638**, 391–396
49. \* “The Growth, Polarization, and Motion of the Radio Afterglow of the SGR 1806-20 Giant Flare”, Taylor, G. B., *et al.* 2005 (**J. Granot** #4 of 11), *ApJ*, **634**, L89–L92
50. \* “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.**, & 4 co-authors, 2005, **ApJ Lett.**, 634, L93–L96
51. \* “A giant  $\gamma$ -ray flare from the magnetar SGR 1806-20”, Palmer, D. M., *et al.* 2005 (**J. Granot** author #10 out of 28), **Nature**, 434, 1107–1109
52. \* “An expanding radio nebula produced by a giant flare from magnetar SGR 1806–20”, Gaensler, B. M., *et al.* 2005, (**J. Granot** author #7 out of 19), **Nature**, 434, 1104–1106

## High Energy Neutrinos

53. \* “Neutrinos from Pulsar Wind Bubbles as Precursors to Gamma-Ray Bursts”, **Granot, J.**, & Guetta, D. 2003, **Phys. Rev. Lett.**, 90, 191102 (4 pages)
54. \* “Neutrinos of Energy  $\sim 10^{16}$  eV from Gamma-Ray Bursts in Pulsar Wind Bubbles”, Guetta, D., & **Granot, J.** 2003, **Phys. Rev. Lett.**, 90, 201103 (4 pages)

## X-ray Flashes, GRBs Viewed Off-Axis & Orphan Afterglows

55. \* “Robust Features of Off-Axis Gamma-Ray Burst Afterglow Lightcurves”, Beniamini, P., **Granot, J.**, & Gill, R. 2022, MNRAS, **515**, 555–570
56. \* “Afterglow Lightcurves from Misaligned Structured Jets”, Beniamini, P., **Granot, J.**, & Gill, R. 2020, **493**, 3521–3534
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