

**Refereed Publications:**

1. **Kargaltsev, O.**, Durant, M., Pavlov, G. G., & Garmire, G. “*First results from Chandra Pulsar Survey (ChaP)*”, 2012, ApJ, submitted, arXiv:1202.3838
2. **Kargaltsev, O.**, Kouveliotou, C., Pavlov, G. G., et al. “*X-ray Observations of a New Unusual Magnetar Swift J1834.9-0846*”, 2012, ApJ, in press, (arXiv:1201.1894)
3. Durant, M., **Kargaltsev, O.**, Pavlov, G. G., Kowalski, P. M., Posselt, B., van Kerkwijk, M. H., & Kaplan, D. L. “*The spectrum of the recycled PSR J0437-4715 and its white dwarf companion*”, 2012, ApJ, in press, (arXiv:1111.2346)
4. **Kargaltsev, O.**, Schmitt, B., Pavlov, G., & Misanovic, Z. “*XMM-Newton Observations of Two Candidate Supernova Remnants*”, 2012, ApJ, 745, 99
5. Chang, C. Pavlov, G. G., **Kargaltsev, O.**, & Shibano, Y. A. “*X-Ray Observations of the Young Pulsar J1357–6429 and Its Pulsar Wind Nebula*”, 2012, ApJ, 744, 81
6. Durant, M., **Kargaltsev, O.**, Pavlov, G., & Chang, C. “*Extended X-ray emission in the vicinity of LS 5039: pulsar wind nebula?*”, 2011, ApJ, 735, 58
7. Durant, M., **Kargaltsev, O.**, & Pavlov, G. G. “*Search for the Optical Counterpart to SGR 0418+5729*”, 2011, ApJ, 742, 77
8. Durant, M., **Kargaltsev, O.**, & Pavlov, G. “*Orbital Variation of the X-Ray Emission from the Double Neutron Star Binary J1537+1155*”, 2011, ApJ, 741, 65
9. Mignani, R. P., Pavlov, G. G., & **Kargaltsev, O.** “*VLT observations of the candidate counterpart to PSR J0108-1431*”, 2011, A&A, 531, 105
10. Durant, M., **Kargaltsev, O.**, & Pavlov, G. G. “*Multiwavelength Spectroscopy of PSR B0656+14*”, 2011, ApJ, 743, 38
11. Pavlov, G., Chang, C., & **Kargaltsev, O.** “*Extended Emission from the PSR B1259-63/SS 2883 Binary Detected with Chandra*”, 2011, ApJ, 730, 2
12. Misanovic, Z., **Kargaltsev, O.**, & Pavlov, G. “*Chandra observations of the TeV source HESS J1834–087*”, 2011, ApJ, 735, 33
13. Misanovic, Z., **Kargaltsev, O.**, & Pavlov, G. “*XMM-Newton observations of SNRs G27.8+0.6 and G28.8+1.5*”, 2010, ApJ, 725, 931
14. Mignani, R. P., Pavlov, G. G., & **Kargaltsev, O.** “*Optical-Ultraviolet Spectrum and Proper Motion of the Middle-aged Pulsar B1055–52*”, 2010, ApJ, 720, 1635
15. **Kargaltsev, O.**, & Pavlov, G. G. “*Pulsar-wind nebulae in X-rays and TeV  $\gamma$ -rays*”, 2010, AIP Conf. Proc., 1248, 25 (arXiv:1002.0885)
16. **Kargaltsev, O.** & Pavlov, G. G. “*Chandra observation of the relativistic binary J1906+0746*”, 2009, ApJ, 702, 433

17. Park, S, **Kargaltsev, O.**, Pavlov, G. G., Mori, K., Slane, P. O., Hughes, J. P., Burrows, D. N., & Garmire, G. P. “*Nonthermal X-Rays from Supernova Remnant G330.2+1.0 and the Characteristics of its Central Compact Object*”, 2009, ApJ, 695, 431
18. **Kargaltsev O.**, Pavlov G. G. & Wong J. “*Young energetic pulsar J1617-5055 and its underluminous nebula*”, 2009, ApJ, 690, 891
19. Pavlov, G., **Kargaltsev, O.**, Wong, J. A., & Garmire, G. P. “*Detection of X-ray Emission from the Very Old Pulsar J0108-1431*”, 2009, ApJ, 691, 458
20. Mignani R., Pavlov G., & **Kargaltsev, O.** “*A possible optical counterpart for the old nearby radio pulsar*”, 2008, A&A, 488, 1027
21. **Kargaltsev, O.** & Pavlov, G. G. “*Pulsar-Wind Nebulae in the Chandra Era*”, in *Proc. of “40 Years of Pulsars: Millisecond Pulsars, Magnetars and More”*, 2008, AIP Conf. Proc., 983, 171
22. **Kargaltsev O.**, Misanovic Z., Pavlov, G., Wong J., and Garmire G. P. “*X-ray observations of parsec-scale tails behind two middle-aged pulsars*” 2008, ApJ, 684, 542
23. Pavlov G. G., **Kargaltsev O.**, & Briskin W. F. “*Chandra Observation of PSR B1823-13 and its Pulsar Wind Nebula*”, 2008, ApJ, 675, 683
24. **Kargaltsev, O.**, Pavlov, G. G., & Garmire, G. P., “*HESS J1804-216 in X-rays and at other wavelengths*”, 2007, ApJ, 670, 643
25. **Kargaltsev, O.**, & Pavlov G. G., “*X-ray emission from PSR J1809–1917 and its pulsar wind nebula, possibly associated with the TeV gamma-ray source HESS J1809–193*”, 2007, ApJ, 670, 655
26. Pavlov, G., **Kargaltsev, O.**, Garmire, G., & Wolszczan, A., “*X-ray emission from the planet pulsar B1257+12*”, 2007, ApJ, 664, 1072
27. **Kargaltsev, O.**, Pavlov, G. G., & Garmire, G. P., “*X-ray emission from PSR B1800-21 and its pulsar-wind nebula*”, 2007, ApJ, 660, 1417
28. **Kargaltsev, O.**, & Pavlov, G., “*UV emission from young and middle-aged pulsars*”, 2007, Astrophysics and Space Science, 308, 287
29. Park, S., Mori, K., **Kargaltsev, O.**, Slane, P. O., Hughes, J. P., Burrows, D. N.; Garmire, G. P., & Pavlov, G. G., “*Discovery of a Candidate Central Compact Object in the Galactic Nonthermal SNR G330.2+1.0*”, 2006, ApJ, 653L, 37
30. **Kargaltsev, O.**, Pavlov, G. G., & Garmire, G. P., “*X-ray Emission from the Double Neutron Star Binary J1537+1155*”, 2006, ApJ, 646, 1139
31. **Kargaltsev, O.**, Pavlov, G. G., & Garmire, G. P., “*X-ray Emission from the Nearby PSR B1133+16 and Other Old Pulsars*”, 2006, ApJ, 636, 406
32. Romani, R. W., **Kargaltsev, O.**, & Pavlov, G. G., “*The Vela pulsar in UV*”, 2005, ApJ, 627, 383
33. **Kargaltsev, O.**, Pavlov, G. G., Romani R. W., & Zavlin, V. E., “*Ultraviolet Emission from the Geminga Pulsar: Connecting X-rays with the Optical*”, 2005, ApJ, 625, 307
34. Mignani, R. P., Pulone L., Iannicola, G., Pavlov, G. G., Townsley, L., & **Kargaltsev, O.**, “*Search for*

*the elusive optical counterpart of PSR J0537-6910 with the HST Advanced Camera for Surveys*", 2005, A&A, 431, 569

35. **Kargaltsev, O.**, Pavlov, G. G., & Romani, R. W., "Ultraviolet Emission from the Millisecond Pulsar J0437-4715", 2004, ApJ, 602, 327
36. **Kargaltsev, O.**, Pavlov, G. G., Teter, M. A., Sanwal, D., "The jets of the Vela pulsar", 2003, New Astronomy Reviews, 47, 487
37. Mignani, R. P., De Luca, A., **Kargaltsev, O.**, Pavlov G. G., Zaggia S., Caraveo P. A., & Becker W., "Search for the Optical Counterpart of the Vela Pulsar X-ray Nebula", 2003, ApJ, 594, 419
38. Pavlov, G. G., Teter, M. A., **Kargaltsev, O.**, & Sanwal, D., "The Variable Jet of the Vela Pulsar", 2003, ApJ, 591, 1157
39. **Kargaltsev, O.**, Pavlov, G. G., Sanwal, D., & Garmire, G. P., "The Compact Central Source of the SNR G266.2-1.2", 2002, ApJ, 580, 1060
40. Pavlov, G. G., **Kargaltsev, O.**, Sanwal D., & Garmire, G. P., "Variability of the Vela Pulsar Wind Nebula Observed with Chandra", 2001, ApJ, 554, L189

### ***Non-refereed publications:***

1. **Kargaltsev, O.**, Gogus, E., Kouveliotou, C., & Pavlov, G. 2011, "Unusually strong X-ray pulsations from Swift J1834.9-0846", The Astronomer's Telegram, 3600, 1
2. Gogus, E., Kouveliotou, C., **Kargaltsev, O.**, & Pavlov, G. 2011, "Swift J1834.9-0846: Precise X-ray Position and the Confirmation of its Spin Period", The Astronomer's Telegram, 3576, 1
3. Pavlov, G. G., Misanovic, Z., **Kargaltsev, O.**, & Garmire, G. P. 2011, "Chandra and XMM-Newton Observations of the Gamma-ray Binary 1FGL J1018.6-5856", The Astronomer's Telegram, 3228, 1
4. Gogus, E., Kouveliotou, C., **Kargaltsev, O.**, & Pavlov, G. 2011, "Swift J1834.9-0846: precise X-ray position and the confirmation of its spin period", GRB Coordinates Network, 12302, 1
5. Paerels, F., Méndez, M., Agueros, M., Baring, M., Barret, D., Bhattacharyya, S., Cackett, E.; Cottam, J., Diaz Trigo, M., Fox, D.; Garcia, M., Gotthelf, E., Hermsen, W., Ho, W., Hurley, K., Konker, P., Juett, A., Kaaret, P., **Kargaltsev, O.**, Lattimer, J., Matt, G., Özel, F., Pavlov, G., Rutledge, R., Smith, R., Stella, L., Strohmayer, T., Tananbaum, H., Uttley, P., van Kerkwijk, M., Weisskopf, M., & Zane, S. 2009, "The Behavior Of Matter Under Extreme Conditions", Astro2010: The Astronomy and Astrophysics Decadal Survey, Science White Papers, no. 230 (arXiv:0904.0435v1)
6. Misanovic, Z., Pavlov, G. G. & **Kargaltsev, O.** "X-ray observations of pulsar J1740+1000", in Proc. of "8 years of Science with Chandra", ([http://cxc.harvard.edu/symposium\\_2007/proceedings/topic\\_3.html](http://cxc.harvard.edu/symposium_2007/proceedings/topic_3.html))
7. **Kargaltsev, O.** & Pavlov, G. G., "Vela PWN: A new perspective", 2004, in "Young Neutron Stars and Their Environments" (IAU Symposium 218, ASP Conf. Proc.), eds F. Camilo and B. M. Gaensler, p. 195, (astro-ph/0310767)

8. Sanwal, D., Pavlov, G. G., **Kargaltsev, O.**, Garmire, G. P., Zavlin, V. E., Burwitz, V., Manchester, R. N. & Dodson, R., “*X-ray Spectrum and Pulsations of the Vela Pulsar*”, in Neutron Stars in Supernova Remnants, ASP ser., v. 271, p. 353, 2002, eds. P.O. Slane & B. M. Gaensler.
9. **Kargaltsev, O.**, Pavlov, G. G., Sanwal D., & Garmire, G. P., “*The Vela pulsar wind nebula resolved with Chandra*”, in Neutron Stars in Supernova Remnants, ASP ser., v. 271, p. 181, 2002, eds. P.O. Slane & B. M. Gaensler.

### ***Conferences and invited talks:***

1. Kargaltsev, O. “Pulsar-wind nebulae in X-rays and gamma-rays: highlights, population analysis, and outlook” 2012, January 18-21, Tucson, Arizona, invited talk at the VERITAS collaboration meeting
2. Kargaltsev, O., Pavlov, G.~G., Durant, M., Kropotina, J., Levenfish, K., Bykov, A. M. “Resolving The Remarkable Vela Pulsar Wind Nebula In Space And Time With Chandra.” 2011, AAS High Energy Astrophysics Division, 12, #20.09
3. Durant, M., Kargaltsev, O., & Pavlov, G.~G. “Pulsar Spectra from IR to Gamma-rays”, 2011, AAS High Energy Astrophysics Division, 12, #20.06
4. Kargaltsev, O. “Multiwavelength observations of pulsar wind nebulae”, 2011, July 11-15, St. Petersburg, Russia, invited talk at the “[Physics of Neutron Stars - 2011](#)” conference
5. Durant, M., Kargaltsev, O., & Pavlov G. G., “Pulsar-wind nebulae: Studying particle SED and its evolution with spatially-resolved spectra”, 2011, July 11-15, St. Petersburg, Russia
6. Durant, M., Kargaltsev, O., & Pavlov, G. “Old But Hot: Ultraviolet Spectrum Of The Millisecond Pulsar J0437-4715”, 2010, Bulletin of the American Astronomical Society, 41, #315.05
7. Kargaltsev O. “Pulsar Wind Nebulae in Gamma-Rays”, Barnard College, Columbia University, NYC, May 28-29, 2010, invited talk at “VERITAS Workshop on High Energy Galactic Physics”
8. Durant, Martin, Kargaltsev, O., & Pavlov, G. “Old But Hot: Ultraviolet Spectrum Of The Millisecond Pulsar J0437-4715”, AAS Meeting #216, #315.05
9. Kargaltsev O. “Pulsar-wind nebulae in X-rays and TeV gamma-rays”, September 7-11, 2009, Bologna, Italy, invited talk at at “X-ray Astronomy 2009: Present Status, Multi-Wavelength Approach And Future Perspectives”
10. Pavlov, G. & Kargaltsev, O. “Chandra Observations of the Vela Pulsar Wind Nebula”, Chandra's First Decade of Discovery, 22-25 September, 2009 in Boston, MA
11. Kargaltsev O. & Pavlov G. “Pulsar-Wind Nebulae in the Chandra Era” at “Supernova Remnants And Pulsar Wind Nebulae In The Chandra Era”, July 8-10, 2009, Boston, MA
12. Schmitt, B., Kargaltsev, O., & Pavlov, G. G. "XMM-Newton Observations of Two Candidate Supernova Remnants" July 8-10, 2009, Boston, MA
13. Kargaltsev O. “Pulsar winds across the electromagnetic spectrum”, Purdue University, October 27, 2009, Lafayette, IN, invited talk at the HEA colloquium at the Department of Physics

14. Kargaltsev O. & Pavlov G. “Chandra observations of Pulsar-Wind Nebulae”, June 15-18, 2009, Marciana Marina, Isola d'Elba, Italy, invited talk at at “Pulsars in their diversity” conference
15. Park, Sangwook, Kargaltsev, O., Pavlov, G., Mori, K., Slane, P. O., Hughes, J. P., Burrows, D. N., & Garmire, G. P. 2009 “Nonthermal X-Rays from Supernova Remnant G330.2+1.0 and the Characteristics of its Central Compact Object”, BAAS, 41, 503
16. Kargaltsev, O. & Pavlov, G. G. “Pulsars and Pulsar-Wind Nebulae: TeV to X-Ray Connection”, 2008, TeV Unidentified Sources Workshop, Penn State University, PA, June 2008
17. Kargaltsev, O. & Pavlov, G. G. “X-ray view of Pulsar-Wind Nebulae”, 2008, 37th COSPAR Scientific Assembly, 13-20 July 2008, Montréal, Canada., p.1447
18. Mori, K., Kargaltsev, O., Pavlov, G. G. et al. “Suzaku mapping observations of the Vela X”, 2008, 37th COSPAR Scientific Assembly, 13-20 July 2008, Montréal, Canada., p. 2105
19. Kargaltsev, O. & Pavlov, G. G. “The Puzzles of the Vela Pulsar-Wind Nebula”, 2008, 10<sup>th</sup> AAS High Energy Astrophysics Division Meeting, HEAD, #21.06
20. Pavlov, G. G., Kargaltsev, O., & Wong, J. “Young Energetic PSR J1617-5055, Its Underluminous Nebula, And TeV Source HESS J1616-508””, 2008, 10<sup>th</sup> AAS High Energy Astrophysics Division Meeting, HEAD, #12.07
21. Kargaltsev, O. & Pavlov G. G. “New puzzles from Vela pulsar-wind nebula”, 2008, AAS High-Energy Astrophysics Division Meeting #10, #12.06
22. Kargaltsev, O., Pavlov, G., Sanwal, D., et al. “X-ray Emission From Vela-like Pulsar B1800-21 And Other Young Pulsars Observed With Chandra” 2006, AAS High-Energy Astrophysics Division Meeting #9, #7.57
23. Kargaltsev, O., Pavlov G. G., Garmire, G. P., & Sanwal, D “Chandra Observations of Radio Pulsars”, 2005, in Six Years of Science with Chandra: Dedicated to Leon Van Speybroeck
24. Kargaltsev, O., & Pavlov, G. G., “X-ray Properties of Pulsars and their Wind Nebulae”, 2004, AAS Meeting 205, #102.14
25. Pavlov, G. G., Kargaltsev, O., Romani, R., & Zavlin, V. , “Far-UV radiation from pulsars: Connecting X-rays with optical”, 2004, American Astronomical Society, HEAD meeting #8, #11.02
26. Pavlov G. G., Kargaltsev, O., Zavlin V. E., & Sanwal, D, “Pulsars and Pulsar-wind Nebulae in the Chandra Era”, 2003, in Four Years of Chandra Observations: A Tribute to Riccardo Giacconi
27. Teter, M. A., Pavlov, G. G., Sanwal, D. & Kargaltsev, O. , “The Twisting Jet from the Vela Pulsar”, 2002, 200<sup>th</sup> AAS Meeting, #78.06; BAAS, Vol. 34, p.779
28. Kargaltsev, O., Pavlov, G. G., Sanwal, D., Garmire, G. P., “The Compact Central Source of the SNR G266.2-1.2”, 2002, 200<sup>th</sup> AAS Meeting, #72.02; BAAS, Vol. 34, p.764
29. Pavlov, G. G., Sanwal D., Kargaltsev, O., & Garmire, G. P. , “The Vela Pulsar and its Synchrotron Nebula: Surprises from Chandra” , 2001, in Two Years of Science with Chandra Symposium in Washington.

**The above publications have been cited 579 times (as of January 24, 2012, excluding self-citations) according to NASA ADS.**

### ***Press releases:***

1. “Firehose-like jet discovered in action”, NASA/CXC News Release, 06/30/2003
2. “Geriatric Pulsar Still Kicking”, NASA/CXC News Release , 02/26/2009

### ***Summary of funded research***

Principle investigator of **21** NASA and NSF funded programs, including 7 *Chandra* programs, 7 *XMM-Newton* programs, 3 *HST* programs, and 2 *Suzaku* programs. Awarded **\$1.1M** in NSF and NASA funding in 2008-2011.

### ***Approved observing and archival programs. External funding record.***

2012 GO Chandra Cycle 13	Principal Investigator, “Is HESS J1741-302 truly dark?”, \$35K
2011 TOO XMM -Newton Cycle 10	Principal Investigator, “New SGR 1833-0832”
2011 GO XMM -Newton Cycle 10	Principal Investigator, “A dark twin of the Crab pulsar”
2011 GTO Chandra Cycle 13	Co-Investigator, " <i>The puzzling outflow from the PSR B1259-63/SS 2883 binary</i> ", \$25K
2011 GTO Chandra Cycle 13	Observer, " <i>Snap-shot survey of new galactic gamma-ray sources.</i> "
2011 DDT Chandra Cycle 12	Principal Investigator, “Is Swift J1834.9-0846 a magnetar related to SNR W41 and HESS J1834-087?”, \$6K
2011 GO HST Cycle 19	Co-Investigator (Admin. PI), “ <i>Thermal emission from the famous double pulsar J0737-3039</i> ”, \$36K
2010 GO HST Cycle 18	Co-Investigator (Admin. PI), “ <i>The magnetar SGR 0418+5729 in the optical and infra-red</i> ”, \$30K

2010 GO HST Cycle 18	Principal Investigator, " <i>ACS polarimetry of the Vela pulsar-wind nebula</i> ", \$50K
2010 GTO Chandra Cycle 12	Observer, " <i>Snap-shot survey of new galactic gamma-ray sources</i> ."
2009 GO Chandra Cycle 11	Principal Investigator, " <i>The long tail of PSR J1740+1000</i> ", \$43.1K
2009 GO Chandra Cycle 11	Co-Investigator, " <i>Young, hot PSR J1357-6429 and its PWN</i> ", \$21.9K
2009 CTO Chandra Cycle 11	Observer, " <i>Snap-shot survey of unidentified galactic GeV sources</i> "
2009 GO XMM-Newton Cycle 8	Principal Investigator, " <i>Searching for PWNe in three center-filled Supernova Remnants</i> ", \$40.3K
2009 GO Suzaku Cycle 4	Principle Investigator, " <i>Crushed plerion HESS J1809-193: TeV to X-ray connection</i> " , \$25.2K
2009 NSF AAG	Principal Investigator, " <i>Collaborative Research: Unidentified Galactic TeV Sources: Neutron Star Connection</i> ", \$252.5K
2009 NASA ADP	Co-Investigator, " <i>Archival Study of Isolated Pulsars and Their Winds</i> ", \$137.3K
2009 NASA ADP	Principal Investigator, " <i>Multiwavelength study of unidentified extended TeV sources</i> ", \$286.2K
2009 VLA	Co-Investigator, " <i>Crushed plerion from radio to gamma-rays</i> "
2009 ATCA	Co-Investigator, " <i>Are the "dark accelerators" dark in radio? Deep imaging of HESS J1616-508</i> "
2008 GO HST Cycle 17	Co-Investigator, " <i>Far-UV Phase-resolved Spectroscopy of PSR B0656+14</i> ", \$34.6K
2008 GO Chandra Cycle 10	Principal Investigator, " <i>X-ray emission from the double neutron star binary J1537+1155</i> ", \$38.2K
2008 GO (LP) Chandra Cycle 10	Co-Investigator, " <i>The unique dynamical Vela pulsar-wind nebula</i> ", \$78.4K
2008 GO Chandra Cycle 10	Co-Investigator, " <i>Imaging the binary plerion</i> "

2008 GO Chandra Cycle 10	Co-Investigator, " <i>X-ray observations of a TeV-emitting pulsar tail</i> "
2008 GTO Chandra Cycle 10	Observer, " <i>Snap-shot survey of compact radio-bright SNRs</i> "
2008 GTO Chandra Cycle 10	Observer, " <i>Extended emission of microquasar LS 5039</i> "
2008 GO Suzaku Cycle 3	Co-Investigator, " <i>Studying the long pulsar tail of the PSR B1929+10 with Suzaku</i> ", \$6.2K
2007 VLA	Co-Investigator, " <i>Resolving Long Pulsar Tails with the VLA</i> "
2007 GO HST Cycle 16	Co-Investigator, " <i>Optical-UV Spectrum of the Middle-aged Pulsar B1055-52</i> "
2007 GO Chandra Cycle 9	Principal Investigator, " <i>Spatially-resolved spectroscopy of pulsar-wind nebulae</i> "
2007 GTO Chandra Cycle 9	Observer, " <i>Snap-shot survey of potential GeV and TeV pulsars</i> "
2007 GO XMM-Newton Cycle 6	Principal Investigator, " <i>Search for crushed plerions: TeV to X-ray connection</i> "
2007 GO XMM-Newton Cycle 6	Principal Investigator, " <i>Studying the longest pulsar tail</i> "
2006 GO Chandra Cycle 8	Principal Investigator, " <i>X-rays from the unusual relativistic binary J1906+0746</i> "
2006 GO Suzaku Cycle 1	Principal Investigator, " <i>Solving the mystery of Vela X: Connection to the Vela pulsar</i> "
2006 GO XMM-Newton Cycle 5	Principal Investigator, " <i>Completing the X-ray census of Plerionic Supernova Remnants within 7 kpc</i> "
2005 GO Chandra Cycle 7	Principal Investigator, " <i>Resolving pulsar-wind nebula around the energetic PSR J1617-5055</i> "
2005 GO HST, Cycle 14	Principal Investigator, " <i>Ultraviolet spectrum of the binary millisecond pulsar J0437-4715</i> "
2005 GO HST, Cycle 14	Principal Investigator, " <i>Studying the spectrum of PSR B0656+14 with ACS</i> "
2004 GO XMM-Newton Cycle 4	Principal Investigator, " <i>Snap-Shot Survey of Supernova Remnants with Plerionic Components</i> "



2004 GO Spitzer Cycle 3	Co-Investigator, “ <i>Mid-IR observations of young pulsars</i> ”
2004 GTO Chandra Cycle 6	Observer, “ <i>X-rays from a Double Neutron Star Binary J1537+1155</i> ”
2004 GTO Chandra Cycle 6	Observer, “ <i>Vela-Like PSR B1800-21 and its Environment</i> ”
2003 GTO Chandra Cycle 5	Observer, “ <i>Center-filled SNR G16.85-1.05 and its surroundings</i> ”
2001 GO Chandra Cycle 3	Co-Investigator, “ <i>The dynamical pulsar-wind nebula in the Vela SNR</i> ”

### ***Refereed Publications:***

1. **Kargaltsev, O.**, Durant, M., Pavlov, G. G., & Garmire, G. “*First results from Chandra Pulsar Survey (ChaP)*”, 2012, ApJ, submitted
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5. Chang, C. Pavlov, G. G., **Kargaltsev, O.**, & Shibano, Y. A. “*X-Ray Observations of the Young Pulsar J1357–6429 and Its Pulsar Wind Nebula*”, 2012, ApJ, 744, 81
6. Durant, M., **Kargaltsev, O.**, Pavlov, G., & Chang, C. “*Extended X-ray emission in the vicinity of LS 5039: pulsar wind nebula?*”, 2011, ApJ, 735, 58
7. Durant, M., **Kargaltsev, O.**, & Pavlov, G. G. “*Search for the Optical Counterpart to SGR 0418+5729*”, 2011, ApJ, 742, 77
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9. Mignani, R. P., Pavlov, G. G., & **Kargaltsev, O.** “*VLT observations of the candidate counterpart to PSR J0108-1431*”, 2011, A&A, 531, 105
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11. Pavlov, G., Chang, C., & **Kargaltsev, O.** “*Extended Emission from the PSR B1259-63/SS 2883 Binary Detected with Chandra*”, 2011, ApJ, 730, 2

12. Misanovic, Z., **Kargaltsev, O.**, & Pavlov, G. “*Chandra observations of the TeV source HESS J1834–087*”, 2011, ApJ, 735, 33
13. Misanovic, Z., **Kargaltsev, O.**, & Pavlov, G. “*XMM-Newton observations of SNRs G27.8+0.6 and G28.8+1.5*”, 2010, ApJ, 725, 931
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15. **Kargaltsev, O.**, & Pavlov, G. G. “*Pulsar-wind nebulae in X-rays and TeV  $\gamma$ -rays*”, 2010, AIP Conf. Proc., 1248, 25 (arXiv:1002.0885)
16. **Kargaltsev, O.** & Pavlov, G. G. “*Chandra observation of the relativistic binary J1906+0746*”, 2009, ApJ, 702, 433
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### ***Non-refereed publications:***

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2. Gogus, E., Kouveliotou, C., **Kargaltsev, O.**, & Pavlov, G. 2011, “*Swift J1834.9-0846: Precise X-ray Position and the Confirmation of its Spin Period*”, The Astronomer's Telegram, 3576, 1
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5. Paerels, F., Méndez, M., Agueros, M., Baring, M., Barret, D., Bhattacharyya, S., Cackett, E.; Cottam, J., Diaz Trigo, M., Fox, D.; Garcia, M., Gotthelf, E., Hermsen, W., Ho, W., Hurley, K., Konker, P., Juett, A., Kaaret, P., **Kargaltsev, O.**, Lattimer, J., Matt, G., Özel, F., Pavlov, G., Rutledge, R., Smith, R., Stella, L., Strohmayer, T., Tananbaum, H., Uttley, P., van Kerkwijk, M., Weisskopf, M., & Zane, S. 2009, “*The Behavior Of Matter Under Extreme Conditions*”, Astro2010: The Astronomy and Astrophysics Decadal Survey, Science White Papers, no. 230 (arXiv:0904.0435v1)
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7. **Kargaltsev, O.** & Pavlov, G. G., “*Vela PWN: A new perspective*”, 2004, in "Young Neutron Stars and Their Environments" (IAU Symposium 218, ASP Conf. Proc.), eds F. Camilo and B. M. Gaensler, p. 195, (astro-ph/0310767)
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9. **Kargaltsev, O.**, Pavlov, G. G., Sanwal D., & Garmire, G. P., “*The Vela pulsar wind nebula resolved with Chandra*”, in Neutron Stars in Supernova Remnants, ASP ser., v. 271, p. 181, 2002, eds. P.O. Slane & B. M. Gaensler.

### **Conferences and invited talks:**

1. Kargaltsev, O. “Pulsar-wind nebulae in X-rays and gamma-rays: highlights, population analysis, and outlook” 2012, January 18-21, Tucson, Arizona, invited talk at the VERITAS collaboration meeting
2. Kargaltsev, O., Pavlov, G.~G., Durant, M., Kropotina, J., Levenfish, K., Bykov, A. M. “Resolving The Remarkable Vela Pulsar Wind Nebula In Space And Time With Chandra.” 2011, AAS High Energy Astrophysics Division, 12, #20.09
3. Durant, M., Kargaltsev, O., & Pavlov, G.~G. “Pulsar Spectra from IR to Gamma-rays”, 2011, AAS High Energy Astrophysics Division, 12, #20.06
4. Kargaltsev, O. “Multiwavelength observations of pulsar wind nebulae”, 2011, July 11-15, St. Petersburg, Russia, invited talk at the “[Physics of Neutron Stars - 2011](#)” conference
5. Durant, M., Kargaltsev, O., & Pavlov G. G., “Pulsar-wind nebulae: Studying particle SED and its evolution with spatially-resolved spectra”, 2011, July 11-15, St. Petersburg, Russia
6. Durant, M., Kargaltsev, O., & Pavlov, G. “Old But Hot: Ultraviolet Spectrum Of The Millisecond Pulsar J0437-4715”, 2010, Bulletin of the American Astronomical Society, 41, #315.05
7. Kargaltsev O. “Pulsar Wind Nebulae in Gamma-Rays”, Barnard College, Columbia University, NYC, May 28-29, 2010, invited talk at “VERITAS Workshop on High Energy Galactic Physics”
8. Durant, Martin, Kargaltsev, O., & Pavlov, G. “Old But Hot: Ultraviolet Spectrum Of The Millisecond Pulsar J0437-4715”, AAS Meeting #216, #315.05

9. Kargaltsev O. "Pulsar-wind nebulae in X-rays and TeV gamma-rays", September 7-11, 2009, Bologna, Italy, invited talk at "X-ray Astronomy 2009: Present Status, Multi-Wavelength Approach And Future Perspectives"
10. Pavlov, G. & Kargaltsev, O. "Chandra Observations of the Vela Pulsar Wind Nebula", Chandra's First Decade of Discovery, 22-25 September, 2009 in Boston, MA
11. Kargaltsev O. & Pavlov G. "Pulsar-Wind Nebulae in the Chandra Era" at "Supernova Remnants And Pulsar Wind Nebulae In The Chandra Era", July 8-10, 2009, Boston, MA
12. Schmitt, B., Kargaltsev, O., & Pavlov, G. G. "XMM-Newton Observations of Two Candidate Supernova Remnants" July 8-10, 2009, Boston, MA
13. Kargaltsev O. "Pulsar winds across the electromagnetic spectrum", Purdue University, October 27, 2009, Lafayette, IN, invited talk at the HEA colloquium at the Department of Physics
14. Kargaltsev O. & Pavlov G. "Chandra observations of Pulsar-Wind Nebulae", June 15-18, 2009, Marciana Marina, Isola d'Elba, Italy, invited talk at "Pulsars in their diversity" conference
15. Park, Sangwook, Kargaltsev, O., Pavlov, G., Mori, K., Slane, P. O., Hughes, J. P., Burrows, D. N., & Garmire, G. P. 2009 "Nonthermal X-Rays from Supernova Remnant G330.2+1.0 and the Characteristics of its Central Compact Object", BAAS, 41, 503
16. Kargaltsev, O. & Pavlov, G. G. "Pulsars and Pulsar-Wind Nebulae: TeV to X-Ray Connection", 2008, TeV Unidentified Sources Workshop, Penn State University, PA, June 2008
17. Kargaltsev, O. & Pavlov, G. G. "X-ray view of Pulsar-Wind Nebulae", 2008, 37th COSPAR Scientific Assembly, 13-20 July 2008, Montréal, Canada., p.1447
18. Mori, K., Kargaltsev, O., Pavlov, G. G. et al. "Suzaku mapping observations of the Vela X", 2008, 37th COSPAR Scientific Assembly, 13-20 July 2008, Montréal, Canada., p. 2105
19. Kargaltsev, O. & Pavlov, G. G. "The Puzzles of the Vela Pulsar-Wind Nebula", 2008, 10<sup>th</sup> AAS High Energy Astrophysics Division Meeting, HEAD, #21.06
20. Pavlov, G. G., Kargaltsev, O., & Wong, J. "Young Energetic PSR J1617-5055, Its Underluminous Nebula, And TeV Source HESS J1616-508", 2008, 10<sup>th</sup> AAS High Energy Astrophysics Division Meeting, HEAD, #12.07
21. Kargaltsev, O. & Pavlov G. G. "New puzzles from Vela pulsar-wind nebula", 2008, AAS High-Energy Astrophysics Division Meeting #10, #12.06
22. Kargaltsev, O., Pavlov, G., Sanwal, D., et al. "X-ray Emission From Vela-like Pulsar B1800-21 And Other Young Pulsars Observed With Chandra" 2006, AAS High-Energy Astrophysics Division Meeting #9, #7.57
23. Kargaltsev, O., Pavlov G. G., Garmire, G. P., & Sanwal, D "Chandra Observations of Radio Pulsars", 2005, in Six Years of Science with Chandra: Dedicated to Leon Van Speybroeck
24. Kargaltsev, O., & Pavlov, G. G., "X-ray Properties of Pulsars and their Wind Nebulae", 2004, AAS Meeting 205, #102.14

25. Pavlov, G. G., Kargaltsev, O., Romani, R., & Zavlin, V. , “Far-UV radiation from pulsars: Connecting X-rays with optical”, 2004, American Astronomical Society, HEAD meeting #8, #11.02
26. Pavlov G. G., Kargaltsev, O., Zavlin V. E., & Sanwal, D, “Pulsars and Pulsar-wind Nebulae in the Chandra Era”, 2003, in Four Years of Chandra Observations: A Tribute to Riccardo Giacconi
27. Teter, M. A., Pavlov, G. G., Sanwal, D. & Kargaltsev, O. , “The Twisting Jet from the Vela Pulsar”, 2002, 200th AAS Meeting, #78.06; BAAS, Vol. 34, p.779
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**The above publications have been cited 579 times (as of January 24, 2012, excluding self-citations) according to NASA ADS.**

***Press releases:***

1. “Firehose-like jet discovered in action”, NASA/CXC News Release, 06/30/2003
2. “Geriatric Pulsar Still Kicking”, NASA/CXC News Release , 02/26/2009