

Curriculum Vitae

Oleg Kargaltsev
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Education

- 6/1999-12/2004 Ph.D., Astronomy & Astrophysics, Pennsylvania State University, University Park, PA, USA
9/1996-6/1998 M.S., Theoretical Physics, Moscow Institute of Physics and Technology, Moscow, Russia
1992-1996 B.S., Physics, Moscow Institute of Physics and Technology, Moscow, Russia

Appointments at GW

- 9/2023-present Professor of Physics, Department of Physics, The George Washington University
8/2017-9/2023 Associate Professor of Physics, Department of Physics, The George Washington University
8/2012-8/2017 Assistant Professor of Physics, Department of Physics, The George Washington University

Previous Appointments

- 2/2008-8/2012 Associate Scientist, Department of Astronomy, University of Florida
4/2007-2/2008 Research Associate, Department of Astronomy & Astrophysics, Pennsylvania State University
1/2005-3/2007 Postdoctoral Research Scholar, Department of Astronomy & Astrophysics, Penn State

Grants, Academic Honors, and Service to the University, Profession, and Community

Summary of federally funded research

During 2008-2023, Kargaltsev was a **PI or Co-PI of 60** and Co-I of another 22 NASA and NSF funded programs (listed below) with the total awarded federal funding of **>\$3.3M** (after subtracting the co-investigator shares). **Since joining GW in August 2012**, Kargaltsev was awarded **\$2.5M** in federal funding (after subtracting the co-investigator shares) from **54** federal awards in **36 of which Kargaltsev is a PI or Co-PI**.

Awards, nominations, and fellowships

2019-2022	GW CCAS Dean's Research Chair Award
2016	GW OVPR Early Career Research Award
2015	Innovative Cross-Disciplinary Excellence (DICE) Award
2015	Columbian College Facilitating Fund (CCFF) Award
2015	Nominated from GW for 2016 Blavatnik National Awards for Young Scientists
2004	Graduate Alumni Association Dissertation Award, Penn State University
2002	Daniel Zaccheus Foundation for Astronomical Science, Penn State University
1998-2001	Braddock Fellowship, Penn State (for excellence in studying)
1996, 1998	I. E. Tamm Theoretical Department fellowship at P. N. Lebedev Physical Institute

Journal and Other Refereeing

2007-present	Regular reviewer (5-7 papers per year on average) for top-ranked international physics, astronomy, and astrophysics journals including Nature, Astrophysical Journal, Astronomy and Astrophysics, Monthly Notices of Royal Astronomical Society, Publications of the Astronomical Society of Japan, The Physics Teacher.
2021-present	Reviewer for Canada Research Chairs, Israel Science Foundation, German Research Foundation

Membership in professional societies

- 2016 – present Honorary Member of Sigma Pi Sigma Society
- 2014 – present American Association of Physics Teachers
- 2000 – present American Astronomical Society

Research collaboration membership

- 2023 – present Member of Advanced X-ray Imaging Satellite (AXIS) Science Team
- 2018 – present Member of Enhanced X-ray Timing and Polarimetry (eXTP) mission team
- 2015 – 2020 Member of Athena X-ray Observatory Science Working Group
- 2014 – present Member of SCORPIO (new instrument proposed for Gemini observatory) team
- 2012 – present Member of Chandra X-ray Visionary Project team “A Legacy Study of the Relativistic Shocks in Pulsar-Wind Nebulae” (with Harvard, Stanford, and Penn State)
- 2007 – 2011 Member of International X-ray Observatory Science Team
- 2008 – 2022 Associate Member of VERITAS collaboration
- 2000 – present Member of Neutron Star Group at Penn State University Department of Astronomy
- 2000 – 2008 Member *Chandra* ACIS Team (Penn State University)

Public outreach

- Organized or co-organized GW participation and represented GW at the Astronomy Night at the National Mall events in 2020, 2019, 2018, 2017, 2016, and 2014, which attracted more than 40,000 visitors in total.
- Press conference “Rotating Spiral Structure of the Vela Pulsar Jet”, at the 221st American Astrophysical Society Meeting, January 2013, Long Beach, CA;
- NASA Hyperwall presentation “Pulsars and Supernova Remnants” for general public at the 221st American Astrophysical Society Meeting, January 2013, Long Beach, CA;
- Developed the content for the Astrophysics Group Webpages and the 2nd and 4th regional DC/VA/MD meetings (held at GW) webpages, distributed GW recruitment materials at these events.

Service to the Department and the University

GW Faculty Senator from CCAS, Spring 2023 - present

Director of Graduate Studies, Physics Department, Fall 2021 – Spring 2023;

OVPB Advisory Council on Research, member, October 2019 – present;

Physics Graduate Program Committee member, 2013, 2016, 2017, 2018, 02/2019-present;

Physics Undergraduate Committee member, 08/2023-present;

Physics Department Web Committee, Chair, 10/2020-08/2021; 08/2023-present;

CCAS Graduate Studies Committee, member, September 2019 – May 2022;

Physics Department Graduate Admissions Coordinator (January 2016 – May 2018; September 2020 – May 2021;

Reviewer for internal GW panels, 2014, 2016, 2018, 2021, 2022;

Member of the GW Astronomy, Physics, and Statistics Institute of Sciences (APSIS), 2015-2020;

Member of the astrophysics faculty search committee in 2015-2016;

Physics Department Colloquium Committee, Member, 2012, 2014, 02/2019-12/2019;

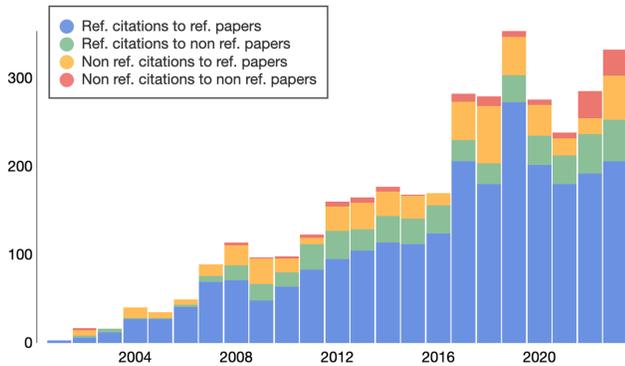
Lead of the Astronomy Intro Courses teaching team, 2014-2018;

Physics Department Equipment committee, Member, 2013.

Publications

291 publications (107 refereed), cited more than 3,130 times (excluding self-citations; according to NASA Astrophysics Data System (ADS): http://adsabs.harvard.edu/cgi-bin/nph-abs_connect?author=kargaltsev,+o).

Other popular metrics: h -index=39 (Google Scholar); $tori$ -index=17.6 (NASA ADS).



Number of citations per year for papers authored or co-authored by Kargaltsev as a function of time.

Source – NASA ADS:

<https://ui.adsabs.harvard.edu/search/q=%20author%3A%22Kargaltsev%22&sort=date%20desc%2C%20bibcode%20desc/metrics>

Articles in Peer-Reviewed Journals

Below “^g” denotes current PhD student of Kargaltsev, “^{fg}” denotes former PhD graduate student of Kargaltsev, and “^p” denotes a postdoctoral scholar working under Kargaltsev’s supervision.

- Rangelov, B., Yang^g, H., Williams, B., **Kargaltsev, O.**, et al. “Chandra X-Ray Observatory Observations of 13 Fermi LAT Sources”, [2024, ApJ, 961, 26](#)
- Kargaltsev, O.**, Hare^{fg}, J., Volkov^p, I., & Lange^g, A. “A Lack of 9 s Periodicity in the Follow-up NuSTAR Observation of LS 5039”, [2023, ApJ, 958, 79](#)
- O'Connor, B., Kouveliotou, C., Evans, P. A., ..., **Kargaltsev O.**, et al. “The Swift Deep Galactic Plane Survey (DGPS) Phase I Catalog”, [2023, ApJS, 269, 49](#)
- O'Connor, B., Brink, J., Buckley, D. A. H., ..., **Kargaltsev O.**, et al. “Identification of 1RXS J165424.6-433758 as a Polar Cataclysmic Variable”, [2023, ApJ, 957, 89](#)
- Hare, J., Pavlov, G. G., Garmire, G. P., & **Kargaltsev O.** “A Dragon Out of Breath? Monitoring High-velocity Outflows from the High-mass Gamma-Ray Binary LS 2883/PSR B1259-63 During the 2017-2021 Binary Cycle”, [2023, ApJ, 958, 5](#)
- Posselt, B., Pavlov, G. G., **Kargaltsev, O.**, et al. “X-Ray and Near-Infrared Observations of the Middle-aged Pulsar B1055-52, Its Multiwavelength Spectrum, and Proper Motion”, [2023, ApJ, 952, 134](#)
- Chen^g, S., **Kargaltsev, O.**, Yang^g, H., Hare^{fg}, J., Volkov^p, I., & Rangelov, B., “Population of X-ray Sources in the Intermediate-Age Cluster NGC 3532: a Test Bed for Machine-Learning Classification”, [2023, ApJ, 948, 59](#)
- Klingler^{fg}, N., Hare^{fg}, J., **Kargaltsev, O.**, Pavlov, G. G., & Tomsick, J., “NuSTAR observations of PSR J1101-6101 and the Lighthouse Pulsar Wind Nebula”, [2023, ApJ, 950, 177](#)
- Hare^{fg}, J., **Kargaltsev, O.**, Younes, G., Pavlov, G., & Volkov, I., “XMM-Newton and Chandra observations of the candidate Fermi-LAT pulsar 4FGL J1015.5-6030”, [2023, ApJ, 951, 80](#)
- de Vries, M., Romani, R. W., **Kargaltsev, O.**, Pavlov, G. G., Posselt, B., Slane, P., Bucciantini, N., Ng, C.-Y., Klingler^{fg}, N., “A Quarter Century of Guitar Nebula/Filament Evolution”, [2022, ApJ, 939, 70](#)

11. Yang^g, H., Hare^{fg}, J., **Kargaltsev, O.**, Volkov^p, I., Chen^g, S., & Rangelov, B., “Classifying Unidentified X-ray Sources in the Chandra Source Catalog Using a Multi-wavelength Machine Learning Approach” [2022, ApJ, 941, 104](#)
12. Klingler^{fg}, N., **Kargaltsev, O.**, Pavlov, G. G., Ng, C. -Y., Gong, Z., & Hare^{fg}, J., “The Goose Pulsar Wind Nebula of PSR J1016-5857: The Birth of a Plerion”, [2022, ApJ, 932, 89](#)
13. **Kargaltsev, O.**, Klingler^{fg}, N. J., Hare^{fg}, J., & Volkov^p, I. “X-Ray Imaging Observations of the High-mass γ -Ray Binary HESS J0632+057” [2022, ApJ, 925, 20](#)
14. Abramkin, V., Pavlov, G. G., Shibanov, Y., & **Kargaltsev, O.**, ” Thermal and Nonthermal Emission in the Optical-UV Spectrum of PSR B0950+08”, [2022, ApJ, 924, 128](#)
15. Hare^{fg}, J., Volkov^p, I., Pavlov, G. G., **Kargaltsev, O.** & Johnston, S., “Precise Timing and Phase-resolved Spectroscopy of the Young Pulsar J1617-5055 with NuSTAR” [2021, ApJ, 923, 249](#)
16. Benbow, W., et al., “A Search for TeV Gamma-Ray Emission from Pulsar Tails by VERITAS”, [2021, ApJ, 916, 117](#), (This is VERITAS collaboration paper. According to collaboration rules, the list of authors is alphabetically ordered list of collaboration members consisting of about 90 names. For this paper **Kargaltsev** contributed approximately 50%.)
17. Volkov^p, I., **Kargaltsev, O.**, Younes, G., Hare^{fg}, J., & Pavlov, G. “NuSTAR Observation of LS 5039”, [2021, ApJ, 915, 61](#)
18. de Vries, M., Romani, R. W., **Kargaltsev, O.**, Pavlov, G., Posselt, B., Slane, P., Bucciantini, N., Ng, S., & Klingler^{fg}, N., “PSR J1709-4429's Proper Motion and its Relationship to SNR G343.1-2.3”, [2021, ApJ, 908, 50](#)
19. Klingler^{fg}, N., Yang^g, H., Hare^{fg}, J., **Kargaltsev, O.**, Pavlov, G., & Posselt, B. “Chandra Monitoring of the J1809-1917 Pulsar Wind Nebula and Its Field”, [2020, ApJ, 901, 157](#)
20. Mori, K., An, H., Feng, Q., Malone, K., Prado, R., Schutt, Y., Dingus, B., Gotthelf, E., Hailey, C., Hare^{fg}, J., **Kargaltsev, O.**, & Mukherjee, R., “Multi-wavelength observations of 2HWC J1928+177: dark accelerator or new TeV gamma-ray binary?”, [2020, ApJ, 897, 129](#)
21. Park, S., Bhalerao, J., **Kargaltsev, O.**, & Slane, P., “NuSTAR Detection of Quiescent Hard X-Ray Emission from SGR 0526-66 in the Large Magellanic Cloud”, [2020, ApJ, 894, 17](#)
22. Hare^g, J., **Kargaltsev, O.**, Pavlov, G. G., & Biniamini, P., “Evolution of the extended X-ray emission from the PSR B1259-63/LS 2883 binary in the 2014-2017 binary cycle”, [2019, ApJ, 882, 74](#)
23. Hare^g, J., Volkov^p, I., **Kargaltsev, O.**, Younes, G., Rangelov, B., “XMM-Newton and Chandra Observations of the Unidentified Fermi-LAT Source 3FGL J1016.5—6034: A Young Pulsar with a Nebula?”, [2019, ApJ, 875, 107](#)
24. Pavlov, G.~G., Hare^g, J., & **Kargaltsev, O.**, “High-speed Ejecta from the Gamma-ray Binary PSR B1259-63/LS 2883”, 2019, Rendiconti Lincei. Scienze Fisiche e Naturali, pp. 1-5, [arXiv:1903.00781](#)
25. Xu, S., Klingler^g, N., **Kargaltsev, O.**, & Zhang, B., “On the broad-band synchrotron spectra of pulsar wind nebulae”, [2019, ApJ, 872, 10](#)

26. Guillot, S., Pavlov, G. G., Reyes, C., Reisenegger, A., Rodriguez, L., Rangelov, B. **Kargaltsev, O.**, “Hubble Space Telescope non-detection of PSR J2144-3933: the coldest known neutron star”, [2019, ApJ, 874, 175](#)
27. Arumugasamy, P., **Kargaltsev, O.**, Posselt, B., Pavlov, G. G., & Hare^g, J., “Possible Phase-dependent Absorption Feature in the X-Ray Spectrum of the Middle-aged PSR J0659+1414”, [2018, ApJ, 869, 97](#)
28. Klingler^g, N., **Kargaltsev, O.**, Pavlov, G. G., & Posselt, B. 2018, “The Variable Pulsar Wind Nebula of PSR J1809–1917”, [2018, ApJ, 868, 119K](#)
29. Hare^g, J., **Kargaltsev, O.**, & Rangelov, B., “Chandra X-Ray Observatory and Hubble Space Telescope Observations of the Intermediate-age Cluster GLIMPSE-C01”, [2018, ApJ, 865, 33](#)
30. Klingler^g, N., Kargaltsev, O., Pavlov, G. G., Ng, C.-Y., Beniamini, P., & Volkov^p, I., “The Mouse Pulsar Wind Nebula”, [2018, ApJ, 861, 5](#)
31. **Kargaltsev, O.**, Klingler^g, N., Chastain^g, S., & Pavlov, G. G., “Toward understanding the physical underpinnings of spatial and spectral morphologies of pulsar wind nebulae”, 2017, Journal of Physics: Conference Series, 932, 012050, [2017arXiv171102656](#)
32. Pavlov, G. G., Rangelov^p, B., **Kargaltsev, O.**, Reisenegger, A., Guillot, S., & Reyes, C., “*Old but Still Warm: Far-UV Detection of PSR B0950+08*”, [2017, ApJ, 850, 79](#)
33. **Kargaltsev, O.**, Pavlov, G. G., Klingler^g, N., & Rangelov^p, B. 2017, “*Pulsar Wind Nebulae Created by Fast-Moving Pulsars*”, 2017, Journal of Plasma Physics, v. 93, 635830501, [arXiv:1708.00456](#)
34. Hare^g, J., **Kargaltsev, O.**, Pavlov, G. G., Rangelov^p, B., & Volkov^p, I., “*Chandra Observations of the field containing HESS J1616-508*”, [2017, ApJ, 841, 81](#)
35. Dubner, G., Castelletti, G., **Kargaltsev, O.**, Pavlov, G. G.; Bietenholz, M.; Talavera, A., “*Morphological Properties of the Crab Nebula: A Detailed Multiwavelength Study Based on New VLA, HST, Chandra, and XMM-Newton Images*”, [2017, ApJ, 840, 82](#)
36. Pannuti, T. G., Rho, J., **Kargaltsev, O.**, et al., “*CTIO, ROSAT HRI, and Chandra ACIS Observations of the Archetypical Mixed-morphology Supernova Remnant W28 (G6.4-0.1)*”, [2017, ApJ, 839, 59](#)
37. Reynolds, S. P., Pavlov, G. G., **Kargaltsev, O.**, Klingler^g, N., Renaud, M., Mereghetti, S. 2017, “*Pulsar-Wind Nebulae and Magnetar Outflows: Observations at Radio, X-Ray, and Gamma-Ray Wavelengths*”, Space Science Reviews, 2017, [DOI 10.1007/s11214-017-0356-6](#)
38. Rangelov^p, B., Pavlov, G., **Kargaltsev, O.**, Reisenegger, A., Guillot, S., & Reyes, C., “*Hubble Space Telescope Detection Of The Millisecond Pulsar J2124-3358 And Its Far-Ultraviolet Bow Shock Nebula*”, [2016, ApJ, 835, 264](#)
39. Klingler^g, N., Rangelov^p, B., **Kargaltsev, O.**, Pavlov, G., Romani, R., Posselt, B., Slane, P., Temim, T., Ng, C.-Y., Bucciantini, N., Bykov, A. M., Swartz, D., & Buehler, R., “*Deep Chandra Observations Of The Pulsar Wind Nebula Created By PSR B0355+54*”, [2016, ApJ, 828, 70](#)
40. Rangelov^p, B., Pavlov, G. G., **Kargaltsev, O.**, Durant, M., Bykov, A. M., & Krassilchtchikov, A., “*First Detection of a Pulsar Bow Shock Nebula in Far-UV: PSR J0437-4715*”, [2016, ApJ, 831, 129](#)

41. Klingler^g, N., **Kargaltsev, O.**, Rangelov, B., Pavlov, G. G., Posselt, B. & Ng C.-Y. “*Chandra Observations of Outflows from PSR J1509-5850*”, [2016, ApJ, 828, 70](#)
42. Younes, G., Kouveliotou, C., **Kargaltsev, O.**, Gill, R., Granot, J., Watts, A. L., Gelfand, J., Baring, M. G., Harding, A., Pavlov, G. G., van der Horst, A. J., Huppenkothen, D., Göğüş, E., Lin, L., & Roberts, O. J. “*The wind nebula around magnetar Swift J1834.9-0846*”, [2016, ApJ, 824, 138](#)
43. Birzan, L., Pavlov, G. G., & **Kargaltsev, O.**, “*Chandra Observations of the Elusive Pulsar Wind Nebula around PSR B0656+14*”, [2016, ApJ, 817, 129](#)
44. Sonbas^p, E., Rangelov^p, B., **Kargaltsev, O.**, Dhuga, K. S., Hare, J., & Volkov, I. “*X-Ray Sources in the Dwarf Spheroidal Galaxy Draco*”, [2016, ApJ, 821, 54](#)
45. Hare^g, J., Rangelov^p, B., Sonbas^p, E., & **Kargaltsev, O.** “*Multi-wavelength study of HESS J1741-302*”, [2016, ApJ, 816, 52](#)
46. Williams, B. J., Rangelov^p, B., **Kargaltsev, O.**, & Pavlov, G. G. “*Magnesium-rich Ejecta in the SNR G284.3–1.8 Around the High-mass Gamma-Ray Binary 1FGL J1018.6–5856*”, [2015, ApJ, 808, L19](#)
47. Pavlov, G. G., Hare^g, J., **Kargaltsev, O.**, Rangelov^p, B., & Durant, M. “*An Extended X-Ray Object Ejected from the PSRB1259-63/LS2883 Binary*”, [2015, ApJ, 806, 192](#)
48. Auchettl, K., Slane, P., Romani, R., Posselt, B., Pavlov, G., **Kargaltsev, O.**, Ng, C.-Y., Temim, T., Weisskopf, M., Bykov, A., Swartz, D. “*X-ray analysis of the proper motion and the pulsar-wind nebula of PSR J1741-2054*”, [2015, ApJ, 802, 68](#)
49. Kirichenko, A., Danilenko, A., Shternin, P., Shibanov, Y., Ryspaeva, E., Zyuzin, D., Durant, M., **Kargaltsev, O.**, Pavlov, G. G., & Cabrera-Lavers, A. “*Optical Observations of Psr J2021+3651 in the Dragonfly Nebula With the GTC*”, [2015, ApJ, 802, 17](#)
50. Rangelov^p, B., Posselt, B., **Kargaltsev, O.**, Pavlov, G., Hare^g, J., & Volkov^p, I. “*Multiwavelength Study of the Northeastern Outskirts of the Extended TeV Source HESS J1809-193*”, [2014, ApJ, 796, 34](#)
51. Aliu, E., et al. “*Spatially Resolving the Very High Energy Emission from MGRO J2019+37 with VERITAS*” [2014, ApJ, 788, 78](#) (This is VERITAS collaboration paper. According to collaboration rules, the list of authors is alphabetically ordered list of collaboration members consisting of about 90 names. For this paper **Kargaltsev** contributed approximately 30%.)
52. Arumugasamy, P., Pavlov, G. G., & **Kargaltsev, O.** 2014, “*XMM-Newton Observations of Young and Energetic Pulsar J2022+3842*” [ApJ, 790, 103](#)
53. **Kargaltsev, O.**, Pavlov, G. G., Durant, M., Volkov^p, I., & Hare^g, J. “*The Dynamic X-Ray Nebula Powered by the Pulsar B1259-63*”, 2014, [ApJ, 784, 124](#)
54. Durant^p, M., **Kargaltsev, O.**, & Pavlov, G. G. “*Hubble Space Telescope Detection of the Double Pulsar System J0737-3039 in the Far-ultraviolet*”, 2014, [ApJL, 783, L22](#)
55. Aliu, E., et al. “*Observations of the Unidentified Gamma-Ray Source TeV J2032+4130 by VERITAS*”, [2014, ApJ, 783, 16](#) (This is VERITAS collaboration paper. According to collaboration rules, the list of authors is alphabetically ordered list of collaboration members consisting of about 90 names. For this paper **Kargaltsev** contributed approximately 40%.)

56. **Kargaltsev, O.**, Rangelov^p, B., Hare^g, J., & Pavlov, G. G. “*Chandra imaging of gamma-ray binaries*”, [2014, *Astronomische Nachrichten*, 335, 301](#)
57. Pannuti, T. G., **Kargaltsev, O.**, Napier, J. P., & Brehm, D. “*XMM-Newton and Chandra Observations of the Ejecta-dominated Mixed-morphology Galactic Supernova Remnant G352.7-0.1*”, [2014, *ApJ*, 782, 102](#)
58. Posselt, B., Pavlov, G.G., Suleimanov, V., & **Kargaltsev, O.** “*New Constraints on the Cooling of the Central Compact Object in Cas A*”, 2013, [ApJ, 779, 186](#)
59. Aliu, E. et al. “*Discovery of the TeV Gamma-ray Emission from CTA by VERITAS*”, [2012, *ApJ*, 764, 38](#)
(This is VERITAS collaboration paper. According to collaboration rules, the list of authors is alphabetically ordered list of collaboration members consisting of about 90 names. For this paper **Kargaltsev** contributed approximately 40%.)
60. Durant^p, M., **Kargaltsev, O.**, Pavlov, G. G., Kropotina, J., & Levenfish, K. “*The Helical Jet of the Vela Pulsar*”, [2013, *ApJ*, 763, 72](#)
61. Levenfish, K. P., Bykov, A. M., Durant, M., **Kargaltsev, O.**, Kropotina, Y. A., Pavlov, G. G., Krassilchchikov, A. M., & Uvarov, Y. A. “*Finest persistent structures in the Vela PWN*” 2013, *Memorie della Societa Astronomica Italiana*, 84, 588
62. **Kargaltsev, O.**, Durant, M., & Pavlov, G. G. “*Pulsar Wind Nebulae from X-rays to VHE γ -rays*”, [2013, *ASPC*, 466, 167](#)
63. Posselt, B., Arumugasamy, P., Pavlov, G. G., Manchester, R. N., Shannon, R. M., & **Kargaltsev, O.** “*XMM-Newton Observation of the Very Old Pulsar J0108-1431*”, [2012, *ApJ*, 761, 117](#)
64. Younes, G., Kouveliotou, C., **Kargaltsev, O.**, Pavlov, G. G.; Göğüş, E.; Wachter, S. “*XMM-Newton View of Swift J1834.9-0846 and Its Magnetar Wind Nebula*”, [2012, *ApJ*, 757, 39](#)
65. **Kargaltsev, O.**, Durant^p, M., Misanovic, Z., Pavlov, G. G. “*Absorption Features in the X-ray Spectrum of an Ordinary Radio Pulsar*”, [2012, *Science*, 337, 946](#)
66. Posselt, B., Pavlov, G. G., Manchester, R. N., **Kargaltsev, O.** & Garmire, G. P. “*Chandra Observations of the Old Pulsar PSR B1451-68*”, [2012, *ApJ*, 749, 146](#)
67. **Kargaltsev, O.**, Durant^p, M., Pavlov, G. G., & Garmire, G. “*Chandra Pulsar Survey (ChaPS)*”, [2012, *ApJS*, 201, 37](#)
68. **Kargaltsev, O.**, Kouveliotou, C., Pavlov, G. G., et al. “*X-ray Observations of a New Unusual Magnetar Swift J1834.9-0846*”, [2012, *ApJ*, 748, 26](#)
69. Durant^p, 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*, 746, 6](#)
70. **Kargaltsev, O.**, Schmitt, B., Pavlov, G., & Misanovic, Z. “*XMM-Newton Observations of Two Candidate Supernova Remnants*”, [2012, *ApJ*, 745, 99](#)
71. Chang, C. Pavlov, G. G., **Kargaltsev, O.**, & Shibanov, Y. A. “*X-Ray Observations of the Young Pulsar J1357—6429 and Its Pulsar Wind Nebula*”, [2012, *ApJ*, 744, 81](#)

72. Durant^p, M., **Kargaltsev, O.**, Pavlov, G., & Chang, C. “*Extended X-ray emission in the vicinity of LS 5039: pulsar wind nebula?*”, [2011, ApJ, 735, 58](#)
73. Durant^p, M., **Kargaltsev, O.**, & Pavlov, G. G. “*Search for the Optical Counterpart to SGR 0418+5729*”, [2011, ApJ, 742, 77](#)
74. Durant^p, M., **Kargaltsev, O.**, & Pavlov, G. “*Orbital Variation of the X-Ray Emission from the Double Neutron Star Binary J1537+1155*”, [2011, ApJ, 741, 65](#)
75. Mignani, R. P., Pavlov, G. G., & **Kargaltsev, O.** “*VLT observations of the candidate counterpart to PSR J0108-1431*”, 2011, [A&A, 531, 105](#)
76. Durant^p, M., **Kargaltsev, O.**, & Pavlov, G. G. “*Multiwavelength Spectroscopy of PSR B0656+14*”, [2011, ApJ, 743, 38](#)
77. Pavlov, G., Chang, C., & **Kargaltsev, O.** “*Extended Emission from the PSR B1259-63/SS 2883 Binary Detected with Chandra*”, [2011, ApJ, 730, 2](#)
78. Misanovic, Z., **Kargaltsev, O.**, & Pavlov, G. “*Chandra observations of the TeV source HESS J1834-087*”, [2011, ApJ, 735, 33](#)
79. Misanovic, Z., **Kargaltsev, O.**, & Pavlov, G. “*XMM-Newton observations of SNRs G27.8+0.6 and G28.8+1.5*”, [2010, ApJ, 725, 931](#)
80. 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](#)
81. **Kargaltsev, O.**, & Pavlov, G. G. “*Pulsar-wind nebulae in X-rays and TeV γ -rays*”, [2010, AIP Conf. Proc., 1248, 25](#) (arXiv:1002.0885)
82. **Kargaltsev, O.** & Pavlov, G. G. “*Chandra observation of the relativistic binary J1906+0746*”, [2009, ApJ, 702, 433](#)
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85. 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](#)
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87. **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](#)
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91. **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](#)
92. Pavlov, G., **Kargaltsev, O.**, Garmire, G., & Wolszczan, A., “*X-ray emission from the planet pulsar B1257+12*”, [2007, ApJ, 664, 1072](#)
93. **Kargaltsev, O.**, Pavlov, G. G., & Garmire, G. P., “*X-ray emission from PSR B1800-21 and its pulsar-wind nebula*”, [2007, ApJ, 660, 1417](#)
94. **Kargaltsev, O.**, & Pavlov, G., “*UV emission from young and middle-aged pulsars*”, [2007, Astrophysics and Space Science, 308, 287](#)
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97. **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](#)
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99. **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](#)
100. 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](#)
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104. Pavlov, G. G., Teter, M. A., **Kargaltsev, O.**, & Sanwal, D., “*The Variable Jet of the Vela Pulsar*”, [2003, ApJ, 591, 1157](#)
105. **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](#)

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107. Pavlov, G. G., **Kargaltsev, O.**, Sanwal D., & Garmire, G. P., “*Variability of the Vela Pulsar Wind Nebula Observed with Chandra*”, [2001, ApJ, 554, L189](#)

Refereed Book Chapters (first-authored):

1. **Kargaltsev, O.**, Lyubarsky, Y., Striani, E., & Cerutti, B. “*Pulsar-Wind Nebulae Recent Progress in Observations*” in “The strongest magnetic fields in the Universe”, Springer 2016, [ISBN: 978-1493935499](#)
2. **Kargaltsev O.**, Rangelov^p, B., & Pavlov G. “*Pulsar-Wind Nebulae as a Dominant Population of Galactic VHE Sources*” in "The Universe Evolution. Astrophysical and Nuclear Aspects", Eds. I. Strakovsky & L. Blokhintsev, 2013, Nova Science Publishers, Inc., [ISBN: 978-1628085457](#)

Refereed Book Chapters (co-authored):

3. Reynolds, S. P.; Pavlov, G. G., **Kargaltsev, O.**, et al. “Pulsar-Wind Nebulae and Magnetar Outflows: Observations at Radio, X-Ray, and Gamma-Ray Wavelengths”, in *Jets and Winds in Pulsar Wind Nebulae, Gamma-Ray Bursts and Blazars*, Eds. A. Bykov, E. Amato, J. Arons, M. Falanga, M. Lemoine, 2019, Springer, [ISBN-13: 9789402416442](#)

Selected Non-refereed Publications

1. Chen, S., **Kargaltsev, O.**, Yang, H., et al. “Dataset of Classified Chandra Sources in Globular Clusters” 2023, [Research Notes of the American Astronomical Society, 7, 215](#)
2. Safi-Harb, S., Burdge, K. B., Bodaghee, A., An, H., Guest, B., Hare, J., Hebbar, P., Ho, W. C. G., **Kargaltsev, O.**, et al. “From Stellar Death to Cosmic Revelations: Zooming in on Compact Objects, Relativistic Outflows and Supernova Remnants with AXIS” 2023, AXIS SNR and Compact Object Science Working Group white paper, [arXiv:2311.07673](#)
3. Hare, J., Pavlov, G. G., **Kargaltsev, O.**, et al. “First Ejection from the PSR B1259-63/LS 2883 High Mass Gamma-Ray Binary Detected During the 2021-2024 Binary Cycle”, 2023, [Research Notes of the American Astronomical Society, 7, 52](#)
4. Volkov, I. & **Kargaltsev, O.** 2022, “*Search for Extended Sources in the Images from Chandra X-Ray Observatory Advanced CCD Imaging Spectrometer*”, 2022, [Research Notes of the American Astronomical Society, 6, 165](#)
5. Gobat, C., Yang, H., **Kargaltsev, O.**, Hare, J., & Volkov, I., 2022, “*Catalog of X-Ray Detected Be Stars (XDBS)*”, [Research Notes of the American Astronomical Society, 6, 163](#)
6. Engel, K. and 93 co-authors, 2022, “*Advancing the Landscape of Multimessenger Science in the Next Decade*”, [Snowmass 2021, white paper](#) (solicited by APS; **Kargaltsev** contributed section on applications of AI to classification of X-ray and gamma-ray sources)

7. Engel, K. and 93 co-authors, 2022. “*The Future of Gamma-Ray Experiments in the MeV-EeV Range*”, [Snowmass 2021, white paper](#) (solicited by APS; **Kargaltsev** contributed section on applications of AI to classification of X-ray and gamma-ray sources)
8. Hare, J., Yang, H., **Kargaltsev, O.**, et al. 2021, “Chandra Observations of MAXI J1848-015 prior to its outburst and a possible NIR counterpart”, [The Astronomer's Telegram, 14499](#)
9. Yang, H., Hare, J., Volkov, I., & **Kargaltsev, O.**, 2021, “Visualizing Multiwavelength Properties of Classified X-Ray Sources from Chandra Source Catalog”, [Research Notes of the American Astronomical Society, 5, 102](#)
10. Hare, J., **Kargaltsev, O.**, Cenko, S. B., et al. 2021, “*X-Rays from V723 Mon are due to Optical Loading in Swift XRT*”, [Research Notes of the American Astronomical Society, 5, 259](#)
11. **Kargaltsev, O.** & Yang, H., “*A Pair of Tidally Disrupted Galaxies from The Hubble Legacy Archive*” [2020, RNAAS, 4, 85](#)
12. Williams, B. J., Auchettl, K., Badenes, C., Castro, D. **Kargaltsev, O.**, and 11 other authors, “*Future X-ray Studies of Supernova Remnants*”, 2019, White Paper submitted to the Astro2020 Decadal Survey, [arXiv:1904.05857](#)
13. in't Zand, J. J. M., Bozzo, E., Qu, J., and 181 co-author, “*Observatory science with eXTP*”, 2019, White Paper in [Science China Physics, Mechanics, and Astronomy, 62, 29506](#)
14. Watts, A. L., Yu, W., Poutanen, J., and 73 co-authors, “*Dense matter with eXTP*”, 2019, White Paper in [Science China Physics, Mechanics, and Astronomy, 62, 29503](#)
15. **Kargaltsev O.**, “*X-ray view of pulsar wind nebulae: What we can learn with Athena?*”, Exploring the Hot and Energetic Universe: The first scientific conference dedicated to the Athena X-ray observatory, Madrid, Spain, 8-10 September 2015, Proceedings of a conference held 8-10 September, 2015 in Madrid, Spain, p.60, [available online](#)
11. **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
12. 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
13. 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
14. 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
15. 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)

16. 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)
17. **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)

Selected Conference Talks and Other Talks and Contributions

Invited talks

1. **Kargaltsev O.**, “*Pulsar Wind Nebulae in TeV to X-ray connection*”, UMD Computational Astrophysics Group meeting, November 17, 2023, University of Maryland
2. **Kargaltsev O.**, “*Pulsars and Pulsar-wind nebulae across EM spectrum*”, Physics of Neutron Stars Workshop, October 26, 2023, University of Maryland
3. **Kargaltsev, O.**, “*Multiwavelength approach to classification of X-ray sources from AXIS GPS and the Galactic population of extended high-energy sources*”, AXIS science team seminar, May 5, 2023, virtual talk
4. **Kargaltsev O.**, “*Galactic plane survey with AXIS*”, AXIS Science Working Group on Compact Object and Supernova Remnants meeting, June 27, 2022, virtual meeting
5. **Kargaltsev O.**, “*Galactic archeology: what can we learn from stellar remains?*”, invited talk at the Department of Physics and Astronomy Colloquium, University of Nevada, Las Vegas, NV, September 11, 2019
6. **Kargaltsev O.**, “*Exploring the connection between the properties of pulsars and pulsar wind nebulae*”, Workshop on Magnetospheres of Neutron Stars and Black Holes, NASA GSFC, Greenbelt, MD, June 2019
7. **Kargaltsev O.**, “*Galactic archeology: what can we learn from stellar remains?*”, invited talk at the Department of Physics Seminar, Florida State University, Tallahassee, FL, April 10, 2019
8. **Kargaltsev O.**, “*X-ray Observations of Pulsars and Pulsar Wind Nebulae*”, JSI Cosmic Accelerators meeting, Annapolis, MD, USA, November 6-9, 2017
9. **Kargaltsev O.**, “*VHE Sources: X-ray and TeV connections*”, 16th AAS HEAD meeting, Sun Valley, ID, USA, August 20-24, 2017
10. **Kargaltsev O.**, “*Pulsar wind nebulae*”, Physics of Neutron Stars – 2017, St. Petersburg, Russia, July 28 - August 1, 2017
11. **Kargaltsev O.**, “*Population of galactic GeV-TeV sources seen by Fermi, VERITAS, and HAWC with a focus on pulsar wind nebulae.*”, Fermi/VERITAS/HAWC workshop 2017, College Park, MD USA, March 10-11, 2017
12. **Kargaltsev O.**, “*Chandra view of manifestations of neutron stars: particle outflows and*

- synchrotron nebulae*”, Chandra Science for the Next Decade, Cambridge, MA USA, August 16-19, 2016
13. **Kargaltsev O.**, “*Is there a useful connection between the pulsar magnetosphere geometry and PWN morphology?*”, The Physics of Pulsar Magnetospheres workshop, NASA GSFC, June 7, 2016
 14. **Kargaltsev O.**, “*X-ray View of Pulsar Wind Nebulae: What Chandra Did Not Tell Us*”, X-Ray Vision Workshop: Probing the Universe in Depth and Detail with the X-Ray Surveyor, Washington, DC, USA, 6-8 October 2015
 15. **Kargaltsev, O.**, “*High-energy astrophysics of pulsars and their winds*”, Physics Department colloquium talk at University of Maryland Baltimore County, October, 7, 2015
 16. **Kargaltsev, O.**, Pavlov., G. G. & Rangelov B. “*Pulsar wind nebulae in X-ray, TeV and in between*”, Future Space-based Gamma-ray Observatories, NASA GSF, February 5-6, 2015
 17. **Kargaltsev, O.**, “*Multiwavelength observations of pulsar wind nebulae*”, Physics of Neutron Stars – 2014, July 28 - August 1, 2014, St. Petersburg, Russia
 18. **Kargaltsev, O.** “*X-ray emission properties of rotation-powered pulsars*”, 40th COSPAR Scientific Assembly, Moscow, Russia, Aug 2-10, 2014
 19. **Kargaltsev, O.**, *Gamma-Ray Emission from Pulsar Wind Nebulae*, 2nd Workshop on Galactic Physics with VERITAS, Columbia University, NY, May 5-7, 2014
 20. **Kargaltsev, O.** “*Isolated NSs and non-accreting pulsars*”, "Neutron Stars (NSs) as Physics Labs: Future Opportunities with NICER Symposium, NASA GSFC, Greenbelt, MD, March 27, 2014
 21. **Kargaltsev, O.**, *Observations of Pulsar-Wind Nebulae*, The Strongest Magnetic Fields in the Universe, Bern, Switzerland, Feb 16-20, 2014
 22. **Kargaltsev, O.** “*Isolated Neutron Stars and Non-Accreting Pulsars*”, Symposium *Neutron Stars as Physics Labs: Future Opportunities with NICER*, NASA GSFC, March 27, 2014
 23. **Kargaltsev, O.**, Pavlov, G., & Durant, M. “*X-ray observations of pulsar-wind nebulae: current status and future prospects*” 2013, XMM-Newton Workshop: The Fast and the Furious: Energetic Phenomena in Isolated Neutron Stars, Pulsar Wind Nebulae and Supernova Remnants, Madrid, Spain, 22-24 May, 2013
 24. **Kargaltsev, O.** “*X-ray and gamma-ray properties of pulsar-wind nebulae*”, Physics Department colloquium at the University of Texas Arlington, Nov 28, 2012
 25. **Kargaltsev, O.** “*Multiwavelength properties of pulsars and their wind nebulae*”, the Supernova Seminar at NASA Goddard Space Flight Center, Dec 12, 2012
 26. **Kargaltsev, O.** “*Electromagnetic Radiation From Pulsars And Magnetars*”, 2012, Apr 25, University of Zielona Góra, Zielona Gora, Poland
 27. **Kargaltsev, O.** “*Pulsar-wind nebulae in X-rays and gamma-rays: highlights, population analysis, and outlook*” 2012, January 18-21, Tucson, Arizona, VERITAS collaboration meeting

28. **Kargaltsev, O.** “*Multiwavelength observations of pulsar wind nebulae*”, 2011, July 11-15, St. Petersburg, Russia, “[Physics of Neutron Stars - 2011](#)” conference
29. **Kargaltsev O.** “*Pulsar Wind Nebulae in Gamma-Rays*”, Barnard College, Columbia University, NYC, May 28-29, 2010 “VERITAS Workshop on High Energy Galactic Physics”
30. **Kargaltsev O.** “*Pulsar-wind nebulae in X-rays and TeV gamma-rays*”, September 7-11, 2009, Bologna, Italy, “X-ray Astronomy 2009: Present Status, Multi-Wavelength Approach And Future Perspectives”
31. **Kargaltsev O.** “*Pulsar winds across the electromagnetic spectrum*”, Purdue University, October 27, 2009, Lafayette, IN, the HEA colloquium at the Department of Physics
32. **Kargaltsev O. & Pavlov G.** “*Chandra observations of Pulsar-Wind Nebulae*”, June 15-18, 2009, Marciana Marina, Isola d'Elba, Italy, “Pulsars in their diversity” conference
33. **Kargaltsev, O.** “*Pulsars and Pulsar-Wind Nebulae: TeV to X-Ray Connection*”, 2008, TeV Unidentified Sources Workshop, Penn State University, PA, June 2008
34. **Kargaltsev, O.** “*X-ray view of Pulsar-Wind Nebulae*”, 2008, 37th COSPAR Scientific Assembly, 13-20 July 2008, Montréal, Canada., p.1447
35. **Kargaltsev, O.** “*Chandra Observations of Radio Pulsars*”, 2005, in Six Years of Science with Chandra: Dedicated to Leon Van Speybroeck

Other selected talks and conference presentations

1. **Kargaltsev, O.**, Hare, J., Posselt, B., Pavlov, G. G., Temim, T. “JWST view of magnetar 4U 0142”, The first Year of JWST, September 11-14, 2023, Baltimore, MD, contributed
2. **Kargaltsev, O.**, Hare, J., & Volkov, I. “Vela pulsar from hard X-ray to GeV gamma-rays: energy-resolved lightcurves and phase-resolved spectra”, 2022 AAS High Energy Astrophysics Division meeting 19, #110.88, contributed talk
3. **Kargaltsev, O.** “Populations of variable sources in Galactic plane from CSC v2”, Chandra Data Science Workshop 2021, virtual conference, contributed talk
4. **Kargaltsev O.**, “*Spatially resolved spectra and dynamics of PWNe*”, 5th Session of the Sant Cugat Forum on Astrophysics, Sant Cugat, Spain, June 14-17, 2016, contributed talk
5. **Kargaltsev, O.**, Pavlov, G. G., Rangelov, B., & Hare, J. “*Fast-moving ejecta from the gamma-ray binary PSR B1259-63/LS 2883*”, 29th International Astronomical Union General Assembly, Honolulu, August 3-14, 2015, contributed talk
6. O’Donnel, C., Hahn, P., **Kargaltsev, O.**, Cobb, B., & Teodorescu, R. “*Improved Conceptual Understanding in Active Learning Reformed Introductory Astronomy Courses*”, 2015 AAPT meeting, July 25-29, 2015, College Park, MD

7. **Kargaltsev, O.**, Pavlov, G. G., Durant, M., Volkov, I., & Hare, J. “*Variable nebula of PSR B1259-63 resolved by Chandra*”, American Astronomical Society, AAS Meeting #223, 2014, #114.05
8. **Kargaltsev, O.**, Bykov, A., Krassilchtchikov, A., Rangelov, B., Pavlov, G., Klingler, N., Kropotina, J., & Levenfish, K., “*The inner structure of the Vela pulsar-wind nebula*”, 40th COSPAR Scientific Assembly, 2-10 August 2014, Moscow, Russia, Abstract E1.15-10-14
9. Brehm, D., **Kargaltsev, O.**, Rangelov, B., Volkov, I., & Pavlov, G. G. “*Automated classification of Chandra X-ray sources*” 2014, American Astronomical Society Meeting Abstracts, 223, #255.13
10. Klingler, N., Rangelov, B., **Kargaltsev, O.**, et al. “*Deep Chandra observations of pulsar tails: PSR B0355+54*” 2014, American Astronomical Society Meeting Abstracts, 223, #153.28
11. Rangelov, B., **Kargaltsev, O.**, & Pavlov, G. G. “*Gamma-ray and X-ray Properties of Pulsar Wind Nebulae and Unidentified Galactic TeV Sources*” 2014, American Astronomical Society Meeting Abstracts, 223, #153.22
12. Hare, J., Rangelov, B., Posselt, B., **Kargaltsev, O.**, & Pavlov, G. G. “*Chandra and Suzaku observations of two galactic TeV sources*” 2014, American Astronomical Society Meeting Abstracts, 223, #153.21
13. **Kargaltsev, O.**, Pavlov, G. G., Durant, M., Volkov, I., & Hare, J. “*Variable nebula of PSR B1259-63 resolved by Chandra*” 2014, American Astronomical Society Meeting Abstracts, 223, #114.05
14. Arumugasamy, P., Pavlov, G., **Kargaltsev, O.** “*XMM-Newton observations of the distant energetic pulsar J2022+3842*” 2013, XMM-Newton Workshop: The Fast and the Furious: Energetic Phenomena in Isolated Neutron Stars, Pulsar Wind Nebulae and Supernova Remnants, 22-24 May, 2013, Madrid, Spain.
15. Pavlov, G., **Kargaltsev, O.**, Posselt, B.; Durant, M. “*X-ray observations of rotation-powered pulsars*” 2013, XMM-Newton Workshop: The Fast and the Furious: Energetic Phenomena in Isolated Neutron Stars, Pulsar Wind Nebulae and Supernova Remnants, 22-24 May, 2013, Madrid, Spain.
16. Pavlov, G. & **Kargaltsev, O.** “*X-ray properties of rotation-powered pulsars*”, 2013, IAU Symposium, 291, 117
17. **Kargaltsev, O.**, Durant, M., Pavlov, G. G., Bykov, A. M., Kropotina, J. & Levenfish, K. “*The Rotating Spiral Structure of the Vela Pulsar Jet*”, 2013, American Astronomical Society, AAS Meeting #221, #443.21
18. Arumugasamy, P., Posselt, B., Pavlov, G. G., Manchester, R. N. & Shannon, R. & **Kargaltsev, O.** “*XMM-Newton Observation of the Very Old Pulsar J0108-1431*”, 2013, American Astronomical Society Meeting Abstracts, 221, #412.07
19. **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
20. Durant, M., **Kargaltsev, O.**, & Pavlov, G. G. “*Pulsar Spectra from IR to Gamma-rays*”, 2011, AAS High Energy Astrophysics Division, 12, #20.06

21. 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
22. 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
23. Durant, Martin, **Kargaltsev, O.**, & Pavlov, G. “*Old But Hot: Ultraviolet Spectrum Of The Millisecond Pulsar J0437-4715*”, AAS Meeting #216, #315.05
24. 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
25. **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
26. Schmitt, B., **Kargaltsev, O.**, & Pavlov, G. G. “*XMM-Newton Observations of Two Candidate Supernova Remnants*” July 8-10, 2009, Boston, MA
27. 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
28. 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
29. **Kargaltsev, O.** & Pavlov, G. G. “*The Puzzles of the Vela Pulsar-Wind Nebula*”, 2008, 10th AAS High Energy Astrophysics Division Meeting, HEAD, #21.06
30. Pavlov, G. G., **Kargaltsev, O.**, & Wong, J. “*Young Energetic PSR J1617-5055, Its Underluminous Nebula, And TeV Source HESS J1616-508*””, 2008, 10th AAS High Energy Astrophysics Division Meeting, HEAD, #12.07
31. **Kargaltsev, O.** & Pavlov G. G. “*New puzzles from Vela pulsar-wind nebula*”, 2008, AAS High-Energy Astrophysics Division Meeting #10, #12.06
32. **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
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