

## **Nadia Kaltcheva**

Department of Physics and Astronomy, University of Wisconsin Oshkosh

### **Employment**

- UW Oshkosh, 07/2010- present, Professor of Physics and Astronomy (department chair 2011-2017, 2023-present)
- UW Oshkosh, 07/2005- 07/2010, Associate Professor of Physics and Astronomy
- UW Oshkosh, 09/2001-07/2005, Assistant Professor of Physics and Astronomy
- Niels Bohr Institute for Astronomy, Physics and Geophysics (Copenhagen, Denmark), 2000, Assistant Research Professor of Astronomy
- University of St. Andrews, Scotland, UK, 1998-1999, Royal Astronomical Society Research Fellowship
- Hoher List Observatory, Bonn, Germany, DAAD Fellow, 1997
- St. Kliment Ohridski University, Sofia, Bulgaria, 1997-2001, Assistant Professor of Astronomy
- Inter-University Center of Astronomy and Astrophysics, Pune, India, Postdoctoral Fellow, 1996

### **Education**

- St. Kliment Ohridski University, Sofia, Bulgaria, Ph.D. degree in Astronomy; M.Sc. degree in Physics, with Honors, major in Optics and Spectroscopy

### **Fellowships, Grants, Awards, Recognitions**

- 2023 UW Oshkosh Edward M. Penson Distinguished Teaching Award
- 2023 F. John Barlow Endowed Professorship at the University of Wisconsin Oshkosh
- 2022 NASA/Wisconsin Space Grant Consortium Special Initiatives Program Award, PI
- 2019 UW Oshkosh Professorial Productivity / Distinguished Professorship Recognition
- 2017 Fall semester – UW Oshkosh sabbatical award
- 2015-2021 National Science Foundation grant "RUI: Stellar Nurseries in the Near Part of the Milky Way" (\$161K), PI
- 2015 UW Oshkosh Faculty Mentor Award
- 2015 National Council of Undergraduate Research Recognition of Excellence in Mentoring Undergraduate Research
- 2014 Wisconsin Space Grant Consortium Higher Education Incentives Award, co-PI
- 2011 NSF supplemental support (\$28K), co-PI
- 2011 UW Oshkosh Duncan Research Award
- 2009 SLC Endowed Professorship of International Relations at the University of Wisconsin Oshkosh
- 2009 Fall semester – UW Oshkosh sabbatical award
- 2009, Wisconsin Space Grant Consortium Faculty Research Seed Grant (\$5000)
- 2007 National Science Foundation grant "RUI: Galactic Spiral Structure Reassessment: a precision photometry approach to complete homogeneous samples" (\$166K), PI
- 2003 Vander Putten International Award, UW Oshkosh
- Multiple International Astronomical Union travel grants (2005, 2004, 2003, 2002, 1999, 1996)
- 2000, 1999, NATO collaborative grants (St. Kliment Ohridski University, Copenhagen Observatory and Athens Observatory)
- 1998, NATO/Astronomical Royal Society Advanced Fellowship (Univ. of St Andrews, Scotland, UK)
- 2000, 1997, Danish Government Visiting Fellowships (Niels Bohr Institute, Copenhagen, Denmark)
- 1997, DAAD (German Academic Exchange Service) grant (University of Bonn, Germany)
- 1996, Inter University Center of Astronomy and Astrophysics Visiting Fellowship (Pune, India)
- 1996, Bulgarian National Science Foundation: Project grant No F617/1996: Stellar Clusters in Galaxies of the Local Group; Bulgarian National Science Foundation award for excellence in research

### **Current Membership to Professional Organizations**

- International Astronomical Union; Member of Division C Education, Outreach and Heritage
- International Astronomical Union; Member of Division G Stars and Stellar Physics
- International Astronomical Union, Member of Executive Committee WG Astronomy for Equity and Inclusion

## Teaching

### **General requirement classes and laboratories (UW Oshkosh).**

(100-level) Physical Science; Introduction to the Solar System (lecture, lab); Stars, Galaxies and the Universe (lecture, lab); College Physics I (workshop mode and lecture/lab/discussion mode), College Physics II (workshop mode and lecture/lab/discussion mode), Astronomy for Everyone.

### **Upper-level physics classes (UW Oshkosh).**

(200-level) Introduction to Astrophysics; Modern Physics; Advanced Physics Lab I; (300-level) Theoretical Methods of Astrophysics, Advanced Physics Lab II, Physical Optics; Galaxies, Interstellar Medium and Star-Formation, (400-level) Statistical Physics and Thermodynamics; Special Topics: Astrophysics; Senior Research Project; Independent Study

**Dual level:** Physical Optics (307/507); Statistical Physics and Thermodynamics (408/608)

**Graduate level:** Master's Thesis Advisor

## Scholarship

Research Field: Astronomy and Astrophysics: open clusters and associations, stellar photometry, Milky Way structure, star-forming fields, stellar polarization, astronomy education.

### **Publications in Refereed Journals**

Topasna, G. A., Mateja, F., **Kaltcheva, N.**, 2023, "BVRI polarization in direction of Stock 19", *Publications of the Astronomical Society of Japan*, Volume 75, Issue 1, February 2023, Pages 269–278

**Kaltcheva, N.**, Berry, P., 2023, "A Simple Stellar Magnitude Scale Demonstration", *Physics Education*, 58 055002

Topasna, G. A., Gibson, S. D., **Kaltcheva, N.**, 2022, "Interstellar Extinction and Polarization of Stars in the Open Cluster NGC 6709", *The Publications of the Astronomical Society of the Pacific*, Volume 134, Issue 1038, id.084301

**Kaltcheva N.**, Nenkova, M., 2021, "Teaching Introductory Astronomy Using Virtual Observations", *Phys. Educ.* 56 065015

Topasna, G. A., Riley, R. W., **Kaltcheva, N.**, 2021, "Interstellar Extinction and Polarization of Stars in the Open Cluster NGC 7160", *The Publications of the Astronomical Society of the Pacific*, Volume 133, Issue 1028, id.104301

**Kaltcheva, N.**, Paunzen, E. Prišegen, M., Golev, V., Watson, M., 2020, "Absolute Magnitudes of Early-type Supergiants from uvby $\beta$  Photometry and Parallax Data", *The Publications of the Astronomical Society of the Pacific*, Volume 132, Issue 1013, id.074203, 12

Topasna, G. A., Jones R., **Kaltcheva, N.**, 2020, "Interstellar Polarization and Extinction toward the Open Cluster NGC 6530", *The Publications of the Astronomical Society of the Pacific*, Volume 132, Issue 1010, id.044301

Bernhard, K., Otero, S., Hümmerich, S., **Kaltcheva, N.**, Paunzen, E., Bohlson, T., 2018, "An investigation of the photometric variability of confirmed and candidate Galactic Be stars using ASAS-3 data", *Monthly Notices of the Royal Astronomical Society*, Volume 479, Issue 3, p.2909-2967

Topasna, G. A., **Kaltcheva, N. T.**, Paunzen, E., 2018, "Interstellar Polarization and Extinction towards the Open Cluster NGC 1502", *Astronomy and Astrophysics*, Volume 615, id.A166

**Kaltcheva N.**, Pritzl B., 2018, "Using stellar spectra to illustrate thermal radiation laws", *Phys. Educ.* **53** 035022

**Kaltcheva, N.**, Golev, V., Paunzen, E., 2017, "Photometric Strömgren-H $\beta$  Quantification for O and B Stars of Luminosity Class V", *Publications of the Astronomical Society of Pacific*, Volume 129, Issue 981, pp. 114201

Topasna, G. A., Daman, E. A., **Kaltcheva, N. T.**, 2017, "Interstellar Polarization and Extinction towards the Open Cluster NGC 457", *Publications of the Astronomical Society of Pacific*, Volume 129, Issue 980, pp. 104201

**Kaltcheva, N.**, Golev, V., Moran\*, K., 2014, "Massive Stellar Content of the Galactic Supershell GSH-305+01-24", *Astronomy and Astrophysics*, 562A, 69K

**Kaltcheva, N.**, Fabbri, V.\*, Conard, T.\*, Golev, V., 2013, "Cepheus Star-Forming Field Revisited", *International Journal of Astronomy and Astrophysics*, vol. 3, 472-479

- Beaver, J., D., **Kaltcheva, N.**, Briley, M., Piehl\*, D., 2013, "Strömgren-H $\beta$  photometry of the galactic cluster NGC 6705 (M11)", The Publications of the Astronomical Society of the Pacific, vol. 125, No. 934, pp. 1412-1420
- Kaltcheva, N.**, Moran\*, K., Gehrman\*, T., Golev, V., 2013, "Homogeneous Distances to Several Stellar Groups in the Second Galactic Quadrant", International Journal of Astronomy and Astrophysics, vol. 3, 10-17.
- Kaltcheva, N.** & Golev, V., 2012, "Galactic Structure toward the Carina Tangent", The Publications of the Astronomical Society of the Pacific, Vol. 124, No 912, pp. 128-139
- Piehl, D., Briley, M. & **Kaltcheva, N.**, 2011, "Strömgren-H $\beta$  photometry of stars in dark clouds", Astronomische Nachrichten, Vol.332, Issue 2, p.159
- Kaltcheva, N.** & Scorcio, M., 2010, "The Carina Spiral Feature: Strömgren-H $\beta$  photometry approach. II. Precise photometric distances and reddening", Astronomy and Astrophysics, 514, A59
- Kaltcheva, N.**, Kuchera, A. & Hathaway, C., 2010, "A uvby $\beta$  photometric analysis of the Monoceros star-forming field", Astronomische Nachrichten, Vol.331, Issue 4, p.384
- Kaltcheva, N.**, 2009, "Strömgren-H $\beta$  photometry photometry of O and B stars in Norma", The Publications of the Astronomical Society of the Pacific, Volume 121, Issue 886, pp. 1326-1333
- Kaltcheva, N.**, 2009, "Lacerta OB1 revisited", The Publications of the Astronomical Society of the Pacific, Volume 121, Issue 884, pp. 1045-1053
- Kaltcheva, N.** & Makarov V., 2007, "The structure and the distance of Cr121 from *Hipparcos* and photometry: resolving the discrepancy", Astrophysical Journal, 667L, 155
- Benko A., Prince M. J., Prince B. J., **Kaltcheva N. T.**, Geissinger P., Schwabacher A. W., 2006, "Chemically Stable Films for Combinatorial Fluoresensor Arrays", Journal for Combinational Chemistry, 8(2), 221
- Kaltcheva, N.**, Jaeger, S., Kaba Bah M. & Briley, M. M., 2005, "The Field of IC 2602: Strömgren-H $\beta$  photometry approach", Astronomische Nachrichten, 326, 738
- Geissinger P., Prince B. J., **Kaltcheva N. T.**, Prince M. J., Schwabacher A. W., 2004, "Fiber-Optic Sensor Technology and Combinational Chemistry", In "Combinational and artificial intelligence methods in materials science", Vol. 804, pJJ7.7.1-JJ7.7.6
- Kaltcheva N.**, 2003, "The Carina Spiral Feature: Strömgren-H $\beta$  photometry photometry approach. I. The photometric database", Astronomy and Astrophysics, 410, 523
- Kaltcheva N.**, Knude J. & Georgiev V., 2003, "Interrelations between Vilnius and Strömgren photometric systems: the luminosity indicator v-X", Astronomy and Astrophysics, 407, 377
- Kaltcheva N.** & Knude J., 2002, "Transformations between Vilnius and Strömgren photometric systems", Astronomy and Astrophysics, 385, 1107
- Knude J. & **Kaltcheva N.**, 2002, "Transformations between Vilnius and Strömgren-H $\beta$  photometric systems", Astronomy and Space Science, 280, 67-70
- Kaltcheva N.**, Gredel R. & Fabricius C., 2001, "The association surrounding NGC 2439", Astronomy and Astrophysics, 372, 95
- Kaltcheva N.**, 2000, "The region of Collinder 121", Monthly Notices of the Royal Astronomical Society, 318, 1023
- Kaltcheva N.**, Olsen E. H. & Clausen J. V., 2000, "Strömgren-H $\beta$  photometry of O and B type stars in star-forming regions. III. Carina Spiral Feature", A&AS, 146, 365
- Kaltcheva N.** & Hilditch R., 2000, "The distribution of bright OB-stars in the Canis Major - Puppis - Vela region of the Milky Way", Monthly Notices of the Royal Astronomical Society, 312, 753
- Kaltcheva N.**, Olsen E. H. & Clausen J. V., 1999, "Strömgren-H $\beta$  photometry of O and B type stars in star-forming regions. II. Monoceros OB2, Canis Major OB1 and Collinder 121", Astronomy and Astrophysics, 352, 605
- Kaltcheva N.** & Olsen E. H., 1999, "Strömgren-H $\beta$  photometry of O and B type stars in star-forming regions. I. Canis Major - Puppis - Vela", Astronomy and Astrophysics, 352, 600
- Kaltcheva N.** & Knude J., 1998, "A test of B-type star Strömgren-H $\beta$  photometric distances via the Hipparcos parallaxes", Astronomy and Astrophysics, 337, 178
- Kaltcheva N.**, 1998, "Strömgren-H $\beta$  photometry of OB stars in the region of the Carina Spiral Feature", Astronomy and Astrophysics Supplement Series, 128, 309
- Kunchev P. & **Kaltcheva N.**, 1997, "New massive star cluster candidates in M33 galaxy", Astrophysics & Space Science, 253, 301

- Kaltcheva N.**, 1995, "Photometric system Strömgren-H $\beta$  - review", Annual reports of the University of Sofia, v. 87
- Kaltcheva N. & Georgiev L.**, 1994 "Strömgren-H $\beta$  photometry of open clusters and OB associations. III. Cen OB1 and Cru OB1", Monthly Notices of the Royal Astronomical Society, 269, 289.
- Kaltcheva N. & Kunchev P.**, 1994, "Strömgren-H $\beta$  photometry of OB stars in Serpens", Astrophysics & Space Science, 222, 39
- Kaltcheva N.**, 1993, "Photographic *uvby* photometry of Globular Clusters M15 and NGC6712", Astrophysics & Space Science, 206, 103.
- Kaltcheva N., & Georgiev L.**, 1993, "Strömgren-H $\beta$  photometry of open clusters and OB associations. II. Tr 16 and Car OB2", Monthly Notices of the Royal Astronomical Society, 261, 847.
- Kaltcheva N., & Georgiev L.**, 1992, "Interstellar reddening for globular cluster NGC 6712 by Strömgren-H $\beta$  photometry", Astronomical Letters and Communications 28, 315.
- Kaltcheva N., Georgiev L. & Ivanov M.**, 1992, "Calibration of *uvby* photometric system in AO Belogradchik", Bulgarian Journal of Physics 19, 42.
- Kaltcheva N. & Georgiev L.** 1992, "Strömgren-H $\beta$  photometry of open clusters and OB associations. I. Ara OB1", Monthly Notices of the Royal Astronomical Society, 259, 166.

### Papers Published in Conference Proceedings

- Kaltcheva, N., Topasna, G., Golev, V.**, 2017, "Strömgren-H $\beta$  photometry and optical polarization study of young open clusters", Francesco's legacy: star formation in space and time Proceedings, Firenze, June 5-9, 2017, Editors: R. Cesaroni, E. Corbelli and D. Galli, Mem. S. A. It, v. 88, p.832
- Kaltcheva, N., Golev, V.;** Beaver, J., Lund, S., Briley, M., 2017, Strömgren-H $\beta$  photometry of the young open cluster NGC 6913, in Formation, evolution, and survival of massive star clusters, Proceedings of the International Astronomical Union, IAU Symposium, Volume 316, pp. 149-150
- Kaltcheva, N., Golev, V.**, 2017, Characterizing Classical Be Stars via Intermediate-band Photometry, in The B[e] Phenomenon: Forty Years of Studies. Proceedings of a Conference held at Charles University, Prague, Czech Republic 27 June - 1 July 2016. Edited by Anatoly Miroshnichenko, Sergey Zharikov, Daniela Korčáková and Marek Wolf. ASP Conference Series, Vol. 508. San Francisco: Astronomical Society of the Pacific, 2017, p.51-56
- Le Mieux, H., **Kaltcheva, N.**, 2016, " Young Stellar Population of the Cygnus Star-Forming Field ", Proceedings of the 25<sup>th</sup> Annual Wisconsin Space Conference (August 14, 2015, Oshkosh, WI), ISSN: 2374-8885
- Christopherson, C., **Kaltcheva, N.**, 2016, "Observing Nebulosities: the Cygnus Superbubble", Proceedings of the 25<sup>th</sup> Annual Wisconsin Space Conference (August 14, 2015, Oshkosh, WI), ISSN: 2374-8885
- Kaltcheva, N. & Golev, V.**, 2015, "Improved Distances and Structure of Several Galactic Star-Forming Fields", EWASS Symposium "Stellar Populations 55 years after the Vatican conference" July 1-7, 2012, Rome, Italy, Mem. S. A. It, v.86, p.344
- Golev, V., & **Kaltcheva, N.**, 2014, "Star Formation in the Prominent H I Shells toward Centaurus" , 2014, Massive Young Star Clusters Near and Far: From the Milky Way to Reionization. 2013 Guillermo Haro Conference, Eds. Y. D. Mayya, D. Rosa González and E. Terlevich. INAOE & AMC, June 2014. ISBN: 978-607-8379-01-9, pp.231-232
- Golev, V., & **Kaltcheva, N.**, 2014, "Star Formation in the Coalsack Loop", Proceedings of Symposium 5: Local Group, Local Cosmology, European Week of Astronomy and Space Science, Turku, Finland, July 8 – July 13, 2013, Mem. S. A. It., v.85, p.593
- Kaltcheva, N. & Golev, V.**, 2013, "Stellar Content of the Young Supershell GSH 305+01-24", in Massive Stars: From  $\alpha$  to  $\Omega$ , held 10-14 June 2013 in Rhodes, Greece; Online at <http://a2omega-conference.net>, id.11
- Kaltcheva, N. & Golev, V.**, 2011, "The Field of Lod 112", in Stellar Clusters & Associations: A RIA Workshop on Gaia, Proceedings. Granada, Spain, May 23 - 27, 2011. Edited by: Alfaro Navarro, E. J.; Gallego Calvente, A. T.; Zapatero Osorio, M. R., pp.363-364
- Kaltcheva, N. & Golev, V.**, 2011, "Improved Distances to Several Galactic OB Associations", in Stellar Clusters & Associations: A RIA Workshop on Gaia. Proceedings. Granada, Spain, May 23 - 27, 2011. Edited by: Alfaro Navarro, E. J.; Gallego Calvente, A. T.; Zapatero Osorio, M. R., pp.299-303
- Kaltcheva, N.**, 2010, "The field of Lacerta OB1", in Star clusters: basic galactic building blocks throughout time and space, Proceedings of the International Astronomical Union, IAU Symposium, Volume 266, p. 427-428

- Kaltcheva, N.**, 2007, “The distribution of early-type stars in the Mon-CMa-Pup-Vel region of the Milky Way”, in Triggered Star Formation in a Turbulent ISM, Edited by B. G. Elmegreen and J. Palous. Proceedings of the International Astronomical Union 2, IAU Symposium #237, held 14-18 August, 2006 in Prague, Czech Republic. Cambridge: Cambridge University Press, 2007., pp.431
- Kaltcheva, N. & Knude, J.**, 2007, “Interrelations Between Strömgren and Vilnius Photometric Systems: An Improvement of Stellar Classification”, in Exploring the Cosmic Frontier: Astrophysical Instruments for the 21st Century. ESO Astrophysics Symposia, European Southern Observatory series. Eds. Andrei P. Lobanov, J. Anton Zensus, Catherine Cesarsky and Phillip J. Diamond. Series editor: Bruno Leibundgut, ESO. ISBN 978-3-540-39755-7. Published by Springer-Verlag, Berlin and Heidelberg, Germany, 2007, p.223
- Kuchera, A., Kaltcheva, N., Hathaway, C.**, 2007, "Photometric Study of the Monoceros Star-Forming Complex", Proceedings of the 17th Annual Wisconsin Space Conference, p. 234, August 16-17, 2007, UW Superior
- Kaltcheva, N.**, 2003, “The Carina Spiral Feature - an investigation based on a complete magnitude-limited uvby  $\beta$  sample”, in A Massive Star Odyssey: From Main Sequence to Supernova, Proceedings of IAU Symposium #212, held 24-28 June 2002 in Lanzarote, Canary island, Spain. Edited by Karel van der Hucht, Artemio Herrero, and Esteban, César. San Francisco: Astronomical Society of the Pacific, 2003., p.558
- Kaltcheva, N.**, 2003, “Strömgren-H $\beta$  photometry of OB Clusters and Associations: the Norma Field”, in “Open Issues in Local Star Formation”. Proceedings of the Ouro Preto Colloquium, Brazil, April 5-10, 2003. Edited by Jacques Lépine and Jane Gregorio-Hetem. Astrophysics and Space Science Library, Volume 299, p.11, . Kluwer Academic Publishers, Dordrecht, 2003.
- Kontizas E., Dapergolas A., Kontizas M., Nordstroem B., Andersen J., Prantzos N. & **Kaltcheva N.**, 2000, Euro-Conference “The Evolution of Galaxies. I- Observational clues”, Granada, Spain, "Age-Metallicity Relation in the LMC", Astrophysics and Space Science, v. 277, p. 333
- Kaltcheva N.**, 1999, “A test of B-type star distance calibrations via the Hipparcos parallax data”, in Egret D., Heck A., eds, ASP Conf. Ser. Vol. 167, “Harmonizing Cosmic Distance Scales in a Post-Hipparcos Era”, Astron. Soc. Pac., San Francisco, p. 263
- Kaltcheva N.**, Andersen M. I., Jönch-Sörensen H. & Sörensen A. N., 1999, “CCD uvby $\beta$  photometry of open clusters. Trumpler 16”, in Craine, D., Tucker R., Barnes J., eds, ASP Conference series 189, CCD Precision Photometry Workshop, Astron. Soc. Pac., San Francisco, p. 252
- Communications to scientific meetings (74 presentations in total; only the last 6 years are listed)**
- Topasna, G., **Kaltcheva, N.**, 2023, “Extinction and polarization of stars in NGC 6633”, Annual Meeting of the European Astronomical Society, Krakow, Poland.
- Topasna, G., **Kaltcheva, N.**, 2023, “Polarization of stars in King 14”, Annual Meeting of the European Astronomical Society, Krakow, Poland.
- Kaltcheva, N.**, Topasna, G., 2022, “Extinction and polarization of bright stars in the CMa OB1 region”, Annual Meeting of the European Astronomical Society, Valencia, Spain.
- Topasna, G., **Kaltcheva, N.**, 2022, “Interstellar polarization and extinction of young open clusters”, Annual Meeting of the European Astronomical Society, Valencia, Spain.
- Kaltcheva, N.**, 2021, “Stellar Content of the GSH 224-01+24 /Seagull Nebula Region”, Star Clusters: the Gaia Revolution, 5-7 October 2021, Online workshop organized by the Institute of Cosmos Sciences (ICCUB-IEEC)
- Kaltcheva, N.**, Nenkova M., 2021, “Interactive Teaching of Astronomy Concepts”, Online workshop MW-Gaia: bringing the Milky Way to schools (organized by the European Cooperation in Science and Technology)
- Block S., **Kaltcheva, N.**, 2020, “Physical Parameters of F and G-type Supergiants from uvby $\beta$  Photometry and Gaia-DR2 “, American Astronomical Society meeting #236, id. 329.03. Bulletin of the AAS, Vol. 52, No. 3
- Kaltcheva, N.**, 2020, “Photometric and Gaia DR2 study of the Monoceros star-forming field“, American Astronomical Society meeting #236, id. 240.02. Bulletin of the American Astronomical Society, Vol. 52, No. 3
- Kaltcheva, N.**, Paunzen, E., 2019, “Evaluation of uvby $\beta$  calibrations via the Gaia parallax data”, European Week of Astronomy and Space Science, Lyon, France
- Kaltcheva, N.**, Topasna, G. A., Jones R., 2019, “Interstellar Polarization and Extinction toward the Open Cluster NGC 6530”, European Week of Astronomy and Space Science, Lyon, France
- Kaltcheva, N.**, 2018, “H-R Diagram of a Sample of Classical Be stars”, *Gaia* DR2 Exploration Lab Workshop, June 24-28, European Space Astronomy Center, Madrid, Spain (contributed talk)

**Kaltcheva, N.** Paunzen, E., 2018, “The HRD of the Upper Main Sequence on the Basis of uvby $\beta$  and Parallax Data”, Space Telescope Science Institute Spring Symposium “The 21<sup>st</sup> Century H-R Diagram”, Baltimore, MD

Topasna, G., **Kaltcheva, N.**, 2018, “Polarimetry of young stars in the MW disk”, European Week of Astronomy and Space Science, Liverpool, United Kingdom

**Kaltcheva N.** Paunzen E, Topasna G., 2017, “Interstellar Extinction and Polarization toward the Open Cluster NGC 1502”, European Week of Astronomy and Space Science, Prague, Czech Republic

**Kaltcheva N.**, Morser D., Homogeneous Metallicity Estimates of Open Clusters, EWASS 2017, S07- Bridging the near and the far: from the Milky Way to nearby galaxies, Prague, Czech Republic, June 26-30, 2017

**Kaltcheva N.**, Golev V., Berghea C., Frouard J., Makarov V., 2017, Physical Parameters of Be stars via intermediate-band photometry, ”, European Week of Astronomy and Space Science, Prague, Czech Republic

**Kaltcheva, N.** , Topasna, G., Golev, V., 2017, “Strömgren-H $\beta$  Photometry and Optical Polarization Study of Young Open Clusters”, Star Formation in Space and Time, Florence, Italy

Topasna, G. A., **Kaltcheva, N.**, 2017, “Interstellar Extinction toward the Young Open Cluster NGC 1502”, American Astronomical Society, AAS Meeting #229, id.343.08,

**Kaltcheva, N.**, Golev, V., 2017, “Characterizing Classical Be Stars via Intermediate-Band Photometry”, International conference “The B[e] Phenomenon: Forty Years of Studies“, Prague, Czech Republic [contributed talk]

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#### **Presentations of UW Oshkosh students (in bold) at national, regional, and local meetings of undergraduate research**

[abbreviations: National Conference for Undergraduate Research (NCUR), Wisconsin Space Conference (WSC), UW System Symposium for Undergraduate Research and Creative Activity (UWS)]

48. **Watson M.**, Kaltcheva N., 2019, Research in the Rotunda, Madison, WI

47. **Watson M.**, Kaltcheva N., 2019, NCUR, Kennesaw State University, Kennesaw, GA

46. **Rose M.**, Kaltcheva N., 2019, NCUR, Kennesaw State University, Kennesaw, GA

45. **Rose M.**, Kaltcheva, N., 2019, UWS, Green Bay, WI

44. **Morser, D.**, Kaltcheva, N., 2017, NCUR, Memphis, TN

43. **Morser, D.**, Kaltcheva, N., 2017, UW Oshkosh Celebration of Scholarship & Creative Activity

42. **Morser, D.**, Kaltcheva, N., McNair Showcase, September 2016, 2017

41. **Christopherson, C.**, Kaltcheva, N., 2016, UW Oshkosh Celebration of Scholarship Symposium

40. **Grosskopf, N.**, Kaltcheva, N., 2016, NCUR, University of North Carolina Asheville

39. **LeMieux, H.**, Kaltcheva, N., 2015, WSC, Oshkosh, WI – **best poster award**

38. **Christopherson, C.**, Kaltcheva, N., 2015, WSC, Oshkosh, WI

37. **LeMieux, H.** Robinson, E., Kaltcheva, N., 2015, WSC, Milwaukee, WI

36. **Lund, S.**, **Robinson, E.**, **LeMieux, H.**, **Grosskopf, N.**, **Christopherson, C.**, N. Kaltcheva, 2015, UW Oshkosh Celebration of Scholarship Symposium, Oshkosh, WI

35. **Christopherson, C.**, Kaltcheva, N., 2015, **CUR Posters on the Hill**, U.S. Capitol

34. **Lund, S.**, Kaltcheva, N., Golev., V., Briley, M., Beaver, J., 2015, NCUR, Spokane, WA

33. **Christopherson, C.**, Kaltcheva, N., Golev., V., 2015 NCUR, Spokane, WA

32. **Grosskopf, Christopherson, LeMieux, Lund, Robinson,** Kaltcheva, 2015, Posters in the Rotunda, Madison, WI

31. **Christopherson, C.**, Kaltcheva, N., 2014, WAPT meeting, Milwaukee, WI, **best poster award**

30. **Christopherson, C.**, Kaltcheva, N., 2014, Posters in the Rotunda, Madison, WI

29. **Bartel, S.**, Kaltcheva, N., 2014, NCUR, Lexington, KY

28. **Fabbri, V.**, **Conard, T.**, Kaltcheva, N., 2014, NCUR, Lexington, KY (talk)

27. **Christopherson, C.**, Kaltcheva, N., 2014, NCUR, Lexington, KY, April 2-5, 2014 (talk)

26. **Conard, T.**, **Fabbri, V.**, Kaltcheva, N., 2013, NCUR, La Crosse, WI (poster)

25. **Gehrman, T.**, **Moran, K.**, Kaltcheva, N., 2013, Celebration of Scholarship, UW Oshkosh, April 2013 (poster)

24. **Bartel, S.**, Kaltcheva, N., 2013, NCUR, La Crosse, WI (talk)

23. **Gehrman, T.**, **Moran, K.**, Kaltcheva, N., 2013, Posters in the Rotunda, Madison, WI

22. **Matheny, M.**, Kaltcheva, N., 2012, UWS, UW Parkside

21. **Bartel, S.**, Kaltcheva, N., 2012, UWS, UW Parkside

20. **Moran, K.**, Kaltcheva, N., 2012, UWS, UW Parkside

19. **Moran, K.**, Kaltcheva, N., 2011, WSC, La Crosse, WI

18. **Moran, K.**, Kaltcheva, N., 2011, Posters in the Rotunda, Madison, WI

17. **Moran, K.**, Kaltcheva, N., 2011, UWS, UW Parkside
16. **Metko, K.**, Kaltcheva, N., 2010, UWS, UW-River Falls (poster)
15. **Metko, K.**, Kaltcheva, N., 2010, UW Oshkosh Celebration of Scholarship (talk)
14. **Osterloh L.**, Kaltcheva N., 2009, NCUR, La Crosse, WI (poster)
13. **Pichelmeyer J.**, Kaltcheva N., 2009, NCUR, La Crosse, WI (poster)
12. **Hathaway C.**, N. Kaltcheva, 2009, NCUR, La Crosse, WI (poster)
11. **Hathaway C.**, N. Kaltcheva, 2009, UW Oshkosh Celebration of scholarship (poster)
10. **Osterloh L.**, Kaltcheva N., 2009, UW Oshkosh Celebration of scholarship (poster)
9. **Pichelmeyer J.**, Kaltcheva N., 2009, Posters in the Rotunda, Madison, WI
8. **Kuchera, A.**, Kaltcheva, N., 2008, Posters in the Rotunda, Madison, WI
7. **Scorcio, M.**, Kaltcheva, N., 2008, Posters in the Rotunda, Madison, WI
6. **Kuchera, A.**, Kaltcheva, N., 2008, UWS, River Falls, WI (talk)
5. **Scorcio, M.**, Kaltcheva, N., 2008, UW Oshkosh Celebration of Scholarship (poster)
4. **Kuchera, A.**, Kaltcheva, N., 2007, Posters in the Rotunda, Madison, WI
3. **Kuchera, A.**, Kaltcheva, N., 2007, UWS, UW Stout (talk)
2. **Kuchera, A.**, Kaltcheva, N., 2007, WSC, UW Superior (talk)
1. **Giuliani M., Wentworth J.**, Kaltcheva N., 2004, UW Oshkosh Celebration of scholarship (poster)

## Selected Recent Service

### **International/National Level**

- Editorial Board Member, International Journal of Astronomy and Astrophysics, January 2011 – present
- Editorial Board Member, American Journal of Physics Resource Letters, (January 2018- 2021)
- National Science Foundation Astronomy and Astrophysics Program, Panelist (2016, 2017, 2019)
- Affiliate member of Coordination Unit 8 (Astrophysical Parameters) of the European Space Agency *Gaia* Mission (2009-13)

### **University, College, Department level**

- UW Oshkosh representative to the Wisconsin Space Grant Consortium (WSGC) (2004 – present)
- UWO Faculty Committee (2023-present)
- UWO “Blind Student Initiative” working group (2022-present)
- Screen and search committee member for the Barlow Planetarium Manager (2022)
- Academic Council for Interdisciplinary Studies (2022-2024)
- McNair Program, Research Advisor (2016-2017)
- UW Oshkosh Faculty Senate (2007 - 2013)
- Committee on Committees (2008-2011)
- Rosebush Professor Review Committee (2002 -2005, 2006-2009)
- Gender Equity Council (2005-2008)
- Personnel Policies Committee (2008-2013)
- COLS promotion committee (2012-2014, co-chair 2013-2014)
- Physics/Astronomy Department chair (2011-2016), co-chair (2017-2020), regularly serving/chairing various department committees and participating in student recruitment initiatives
- UW Oshkosh student recruitment events: Mathematical Problem-Solving Contest (2022, presenter); “Decision 2022”, Preview day/academic fair/Physics department open house on a regular basis
- UW Oshkosh Celebration of Scholarship: judge (2019, 2021, 2022)
- Workshop presenter “Introduction to stellar spectra”, Wisconsin Association of Physics Teachers Meeting (October 2016); UW Oshkosh CAPP workshop presenter (2018, 2019); CAPP Preview Day (2019), attended Phox Valley Physics and Physical Science Share meetings (2022, 2020, 2019, 2018); CAPP liaison (2017 – present)