Contact and Biographical Information

Vasiliki Pavlidou
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Education

PhD, 2005, Astronomy	University of Illinois at Urbana-Champaign, USA
M.Sc., 2001, Astronomy	University of Illinois at Urbana-Champaign, USA
B.Sc., 1999, Physics	University of Thessaloniki, Greece

Current Positions

2023-present	Professor	Department of Physics, University of Crete, Greece
2013-present	Affiliated Faculty	Foundation of Research and Technology – Hellas (*Deputy Director, Institute of Astrophysics 2021 – present)*
2023-present	Associate Editor, Theoretical Astrophysics	**Astronomy & Astrophysics** Journal

Past Professional Appointments

2018-2023	Associate Professor	Department of Physics, University of Crete, Greece
2013 (elected 2010) -2018	Assistant Professor	Department of Physics, University of Crete, Greece
2012-2013	Marie Curie Fellow	Foundation for Research and Technology - Hellas
2011-2012	Postdoctoral Fellow	Max-Planck Institute for Radio Astronomy, Bonn, Germany
2008-2011	Einstein Fellow	California Institute of Technology
2005-2008	KICP Fellow	The University of Chicago

Research Interests

- Interstellar medium physics, Galactic magnetism, cosmic magnetism
- Polarimetry
- Cosmological structure formation, dark matter, dark energy, cosmic microwave background
- Astrophysical sources of cosmic rays, γ-rays, and neutrinos
- Relativistic jets and supermassive black holes
- Astrostatistics - spatial and time correlations, analysis of diffuse backgrounds, point sources in the low-statistics limit, population properties

Publications

Refereed publications: total:128; few-author: 97; first-author: 15; supervising-author: 33
Citations:>10,000 (>16,000 Google scholar); h-index: 49 (54 Google Scholar); i-100 index: 26; i-10 index: 106; m-index: 1.9 source: SAO/NASA Astrophysics Data System

FELLOWSHIPS AND AWARDS

2014	Award for Women in Science (Greece)	L'Oreal-UNESCO
2008	Einstein Fellowship	NASA
2002	*Amelia Earhart* Fellowship	Zonta Foundation
2002	Excellent teacher award (top 10% campuswide)	University of Illinois
1999	Scholarship for PhD studies abroad	Greek State Scholarships Foundation (IKY)
1999	Graduate College Fellowship	University of Illinois

FUNDING (AS PI OR SCIENCE PI)

2020-2023 Hellenic Foundation for Research and Innovation (PI)
CIRCE (€200k) *"Cosmic rays at the highest energies: exploring new astrophysics and astroparticle phenomena for the Interpretation of Recent Composition Experimental data"*

2020-2023 FORTH Synergy Grants (PI)
MagMASim (€80k) *"Reconstructing the Magnetic field of the Milky way via Astrophysical Techniques and Numerical Simulations"*

2016-2023 Stavros Niarchos Foundation Grant (co-PI)
PASIPHAE ($1.4M) *"Polar-Areas Stellar imaging in Polarization High-Accuracy Experiment*"

2012-2015 Aristeia I Grants of the Greek State Secretariat of Research and Technology (Science PI),
RoboPol (€330k) "*Unveiling the Physics of Supermassive Black Holes and Relativistic Jets with Optical Polarization Observations of Blazars*"

2012-2016 Marie Curie Career Integration Grants (Science PI)
JetPop (€100k) "*Unveiling the Physics of the Most Active of Galaxies: Using Blazars as Laboratories to Study Supermassive Black Holes and Relativistic Jets*"

2009-2010 NASA Fermi GI Cycle 2 Grant (PI)
($80k) "Anisotropy and energy spectrum of the gamma-ray background as probes of dark matter and astrophysical sources"

SCIENTIFIC COLLABORATIONS & PROFESSIONAL ORGANIZATIONS

In Leadership Positions: The RoboPol Collaboration (Management Panel Chair, 2013-present)

Memberships: PASIPHAE Collaboration (Founding Member, 2016-present), Telescope Array Collaboration (Associate Member, 2018-present), OVRO Collaboration (2008-present), LiteBird Collaboration (2022-present), SMILE Collaboration (2022-present), ARGOS Collaboration (2022-present)

Past Memberships: The Fermi LAT Collaboration (2008-2012); The Pierre Auger Collaboration (2007-2010)

Professional Organizations: Hellenic Astronomical Society (Governing Council, 2016-2020); European Astronomical Society; International Astronomical Union

SERVICE

Referee (A&A, A&ALett, JCAP, ApJ, ApJL, MNRAS, MNRASLett, PhysRevD, PhysRevLett)

Proposal Reviewer (EU INFRAIA, INFRADEV, MSCA actions, Hellenic Foundation for Research and Innovation, Greek State Scholarships Foundation, NASA Fermi GI Program, NASA Einstein Fellowship, Caltech SURF Program)

Education: IAU National Astronomy Education Coordinator (2020-2024); Chair, "Eureka" creative teaching prize committee (2022-present); Vice-Chair, Scientific Supervising Committee, Model Gymnasium of Heraklion (2021-present); Coordinator, Physics Department Practical Training Program (2014-2024)

Administration, FORTH: Deputy Director, Institute of Astrophysics, FORTH (2021-present); Scientific Council, Institute of Astrophysics, FORTH (2019-2021)

Administration, National: Alternate Member, National Astronomical Committee (Greece) (2020-2022); Member, National Astronomical Committee (Greece) (2022-2024); Member, Hellenic Astronomical Society Governing Council (2016-2020)

Workshop/Conference Organization:

- SOC, International Astroparticle Physics Symposium (IAPS) at Colorado School of Mines, 05/2008
- SOC, The impact of high-energy astrophysics experiments on cosmological physics, Chicago, IL 10/2008 http://kicp-workshops.uchicago.edu/impact-2008
- SOC, Anisotropy and Energy Spectrum of the Cosmic Gamma-ray Background as probes of Dark Matter and Astrophysical sources, Zurich, Switzerland, 11/2009
- Session Convener, High-energy Astro Session, TeV Particle Astrophysics 2010, Paris, France, 07/2010 http://irfu.cea.fr/Meetings/TeVPA
- SOC, Identifying the Physics Potential of Multi-wavelength and Multi-messenger Anisotropy Studies Workshop, Columbus, OH, 06/2010, https://ccapp.osu.edu/workshops/identifying-physics-potential-multi-wavelength-and-multi-messenger-anisotropy-studies
- SOC, Extreme-Astrophysics in an Ever-Changing Universe - Time-Domain Astronomy in the 21st Century, Ierapetra, Greece, 06/2014, http://www3.mpifr-bonn.mpg.de/div/jhs/Welcome.html
- SOC, Alternative Gravity and Alternative Matter Workshop, Heraklion, Crete, 05/2015, http://hep.physics.uoc.gr/gravihepcosmo2015/Home.html
- Scientific Organizer, Symposium S2: "Understanding CMB Polarization Foregrounds - Clearing the Path to Inflationary B-modes", EWASS 2016, Athens, Greece, 07/2016 http://eas.unige.ch/EWASS2016/session.jsp?id=S2
- SOC, The 13th Hellenic Astronomical Conference, Heraklion, Greece, 07/2017, http://www.helas.gr/conf/2017/
- Session Convener, Extragalactic Sources Session, TeV Particle Astrophysics 2017, Columbus, OH 08/2017, https://tevpa2017.osu.edu/
- Session Convener, Session 2: "Extragalactic Astronomy and Astrophysics", The 14th Hellenic Astronomical Conference, Volos, Greece, 07/2019, http://www.helas.gr/conf/2019/
- Scientific Organizer, Special Session SS6: "Multiwavelength Polarization of Blazar Jets", Virtual Event, 06/2020, https://eas.unige.ch/EAS2020/session.jsp?id=SS6
- SOC, "Looking at the polarized Universe: past, present, and future" Workshop, Virtual Event, 05/2021 https://robopol.physics.uoc.gr/workshop
- Session Convener, Session 3: "Cosmology and Relativistic Astrophysics", The 15th Hellenic Astronomical Conference, Virtual Event, 07.2021, http://www.helas.gr/conf/2021/
- SOC, Syncretism 2022 – Particle Physicists Dining with Astrophysicists, Chania, Crete, 06/2022,https://syncretism2022.physics.uoc.gr/
- SOC Co-Chair (w/ Blandford), IAU Symposia: The multimessenger chakra of blazar jets, Kathmandu, Nepal, 12/2022, http://multimessengerchakra2022.physics.uoc.gr/

- SOC, Syncretism 2024 – Particle Physicists Dining with Astrophysicists, Rethymnon, Crete, 06/2024, https://syncretism.physics.uoc.gr/

Selected Outreach:

- Digital Sky Academy, KICP, The University of Chicago 2008, presentation on Cosmic Rays http://kicp.uchicago.edu/events/kicp_workshops-2008.html#id_82
- "The Dark Universe" (talk in Greek), "Basilis Xanthopoulos" Math Competition Award Ceremony, Drama, Greece, 2014 https://www.youtube.com/watch?v=6ZRHTkD0twU
- "The gears of the scientist and the gears of science" (talk in Greek), TEDxUniversity of the Aegean, Syros, Greece, 2015, https://www.youtube.com/watch?v=-hdSSbrX4ng
- "The paradox of our cosmic insignificance" (talk in Greek), TEDxKomotini, Komotini, Greece, 2018, https://www.youtube.com/watch?v=up-Pxb_Q4bQ
- Panelist, Dialogues: Astronomy, organized by the Stavros Niarchos Foundation, Eugenidis Foundation New Digital Planetarium, 2018, https://www.youtube.com/watch?v=PUzbil_KMJw
- "The Evolution of the Universe" (talk in Greek), "Darwin Mondays", 2018, Natural History Museum, Heraklion, Greece, https://www.youtube.com/watch?v=TnEA3XjZ1xg
- "School of Astrophysics" for high school students, organized by IA-FORTH (2021, 2022, 2023), https://www.ia.forth.gr/el/astroschool
- "Pseudo-divination and Astrology" article in Greek (with K. Tassis), newspaper "To Vima", 01/2022, https://www.in.gr/2022/01/10/b-science/gnomes/eidikoi/pseydomanteia-tis-astrologias/
- "The Universe is Comprehensible!" talk in Greek for "Open Science" series of public engagements by FORTH, http://bb.med.uoc.gr/frm18773.html
- "The stars at the park", two-day conference for the general public organized by the Hellenic Parliament Foundation and the Hellenic Space Center, 30/6-1/7 2023, https://www.youtube.com/watch?v=ibzpu_L_XiU&ab_channel=HellenicParliamentTV and https://www.youtube.com/watch?v=wdS5zk5wQ00&ab_channel=HellenicParliamentTV

TEACHING

University of Crete, Department of Physics

Φ111 General Mathematics I *(at the level of Thomas)*; Φ112, General Mathematics II *(at the level of Thomas)*; Φ211 Differential Equations I *(at the level of Zill)*; Φ301 Electromagnetism I *(at the level of Griffiths)*; Φ303 Quantum Mechanics I *(at the level of Sakurai)*; Φ534 High Energy Astrophysics *(at the level of Longair)*; Φ631 Radiative Processes in Astrophysics *(at the level of Rybicki & Lightman)*; Φ509 Classical Electrodynamics *(at the level of Jackson)*

Mathesis MOOC Platform, Crete University Press (http://mathesis.cup.gr)

EUR1.1 A Journey in the Universe. First Stop: The Solar System
(Introductory Astronomy MOOC for the general public, in Greek)

EUR1.2 A Journey in the Universe. Second Stop: Are we alone?
(Introductory Astronomy MOOC for the general public, in Greek)

ΕΠ3.1 Irrationality and Pseudoscience: A course for the citizen of our times
(MOOC on pseudoscience and the merits of the scientific method for the general public, in Greek)

University of Illinois at Urbana-Champaign, Department of Astronomy

ASTR 100 Introduction to Astronomy; ASTR 121 The Solar System;
ASTR 122 Stars and Galaxies; ASTR 190 Astronomy Lab

UNDERGRADUATE STUDENT MENTORING

Current (U. Crete): Myrto Falalaki

Alumni: M. Mastorakis, N. Triantafyllou, A. Tersenov, A. Pouliasi, O. Kanavou, G. Korkidis, D. Chatzakis, S.-K. Fouka, N. Mandarakas, G. Magkos, A. Lalakos, K. Kokolakis, K. Grammatikos, D. Tanoglidis (U. Crete); M. Krikeli, A. Litsa (U. Thessaloniki); D. Feldman, B. Hensley (Caltech); C. Rahaman (U. Chicago)

GRADUATE (MSC) STUDENT MENTORING

Alumni: Anna Kyvernitaki-Synani, N. Loudas, N. Triantafylloy, G. Korkidis, M.-C. Velli, K. Kokolakis, D. Tanoglidis, I. Komis (U. Crete)
E. Foukarakis (co-advising with I. Antoniadis @ FORTH)
C. Vasilaki (co-advising with K. Petraki @ Sorbonne),
N. Mandarakas (co-advising with D. Blinov @ FORTH),

PHD STUDENT MENTORING

Current (U. Crete): G. Korkidis (first prize + audience prize, 3-min thesis competition),
S. Romanopoulos (6-month visit to Chatziioannou LIGO group @Caltech),
A. Tsouros (HFRI Fellow, top-ranked among all Physical Sciences candidates)

Alumni: I. Liodakis (U. Crete, currently: NASA Fellow at Marshall;
International Astronomical Union Gruber Fellow 2020-2023;
KIPAC Stanford Fellow 2017-2020; Best Thesis Award
2016-2017, Hellenic Astronomical Society; Young Researcher Award 2017,
University of Crete, ERC Starting Grant 2022)

W. Max-Moerbeck, J. Richards (Caltech, advisor: Readhead);
J. Siegal-Gaskins, T. Venters (U. Chicago, advisor: Olinto);
B. Siffert (U. Federal do Rio de Janeiro, advisor: De Mello Neto)

POSTDOCTORAL RESEARCHER MENTORING

Alumni: **D. Blinov** (U. Crete, 2013-2018)

INVITED TALKS AND SELECTED SEMINARS (PAST 10 YEARS)

- *New Physics in the Cosmos*, Origins Colloquium, Chalmers University of Technology, Sweden (January 2024)
- *Cosmology at the edges: probing the contents of the Universe on turnaround scales*, Physics Colloquium, University of Ioannina, Greece (June 2023)
- *Ultra-high-energy cosmic rays: taming the Universe's highest-energy particle beam*, High Energy Physics Seminar, University of Athens, Greece (March 2023)
- *New Physics in the Cosmos,* Physics Colloquium, University of Crete (February 2023)
- *Cosmology at the edges: probing the contents of the Universe on turnaround scales*, KIPAC Tea Talk,

Stanford University, USA (November 2022)

- *Cosmology at the edges: probing the contents of the Universe on turnaround scales*, Astronomy Department Colloquium, University of California – Berkeley, USA (November 2022)
- *A New Probe of Dark Energy*, Astrophysics Seminar, ITT Hyderabad, India (November 2022)
- *A New Probe of Dark Energy,* invited talk, Heraklion Workshop on Gauge Theories and Gravity - A Memorial Meeting for Theodore Tomaras (July 2022)
- *Synergies with RoboPol and other optopolarimetric experiments*, invited talk, COSPAR2022 Scientific Event E1.12, Athens, Greece (July 2022)
- *A New Probe of Dark Energy*, Astronomy Department Colloquium, University of Illinois at Urbana-Champaign, USA (November 2021) https://www.youtube.com/watch?v=cltBwu3t5v4&ab_channel=InstituteofAstrophysicsFORTH
- *A New Probe of Dark Energy*, Cosmic Physics Seminar, Fermilab, USA (November 2021)
- *A New Probe of Dark Energy*, CosmoStat Seminar, CEA Saclay, France (March 2021)
- *A New Probe of Dark Energy*, Galaxy Clusters Seminar, Argelander Institute for Astronomy, University of Bonn, Bonn, Germany (January 2021)
- *A New Probe of Dark Energy*, Physics Colloquium, University of Crete (April 2020), https://www.youtube.com/watch?v=Wnb2VDGnZzs&t=5s&ab_channel=InstituteofAstrophysicsFORTH
- *New Physics in the Cosmos,* special seminar, Max-Planck-Institut Fuer Kernphysik (January 2020)
- *Understanding blazars through optopolarimetric monitoring*, invited talk, Understanding blazars through multiwavelength variability workshop, Stanford, CA (August 2019)
- *The RoboPol Optical Polarization Monitoring Program*, invited talk, Monitoring the Non-thermal Universe HAP Workshop, Cochem, Germany (September 2018) https://indico.scc.kit.edu/event/390/timetable/#20180917.detailed
- *The Drunken Trek of Ultra-high Energy Cosmic Rays through the Magnetic Field of the Milky Way*, KICP Seminar, University of Chicago, Chicago, IL (July 2018)
- *Heavy Cosmic Rays at the Highest Energies or New Physics at 50 TeV?* University of Illinois Astronomy Seminar, University of Illinois, Urbana, IL (July 2018)
- *New physics phenomenology with Xmax*, invited contribution, JEM/EUSO and POEMMA meeting, Muerren, Switzerland (June 2018)
- *RoboPol: Optopolarimetric Monitoring of Blazars from the Skinakas Observatory*, EWASS 2017, Prague, Czech Republic (June 2017)
- *The RoboPol Optical Polarization Monitoring Program,* invited talk, Polarised Emission from Astrophysical Jets Conference, Ierapetra, Greece (June 2017) http://www3.mpifr-bonn.mpg.de/old_mpifr/jetpol/jetpol/Home.html
- *The RoboPol Optical Polarization Monitoring Program*, invited talk, Monitoring the Non-thermal Universe HAP Workshop, Cochem, Germany (December 2016) https://indico.scc.kit.edu/indico/event/254/timetable/#20161208.detailed
- *Optical Polarization Variability in Blazars*, Astrophysics Colloquium, Jet Propulsion Laboratory (September 2015) http://sciencetalks.jpl.nasa.gov/cgi/mtgabstract.cgi?series=astrophysics&meetingfile=../meetings/2015/ac2015090201.txt
- *RoboPol: First season rotations of optical polarization plane in blazars*, 12th Hellenic Astronomical Conference, Thessaloniki, Greece (July 2015) http://www.helas.gr/conf/2015/program_2015.pdf
- *Relativistic Jet Astrophysics from Skinakas with a Unique Optical Polarimeter*, Astronomy Colloquium, University of Illinois at Urbana-Champaign (June 2014). http://illinois.edu/calendar/detail/650/31908863

- *Relativistic Jet Astrophysics from Skinakas with a Unique Optical Polarimeter*, Physics Colloquium, University of Crete (February 2014). https://www.physics.uoc.gr/sites/files/physics/colfiles/col060214.pdf
- *How to unravel the origin of UHECRs using multi-wavelength instruments: the future,* Multimessenger Approach to Cosmic Rays: Origins and Space frontiers workshop, IAP Paris (November 2013). http://macros2013.in2p3.fr/program.php
- *Deciphering the gamma-ray sky: intergalactic magnetic fields, relativistic jets, and the search for dark matter in the Fermi era*, Astronomy Colloquium, Princeton (February 2013). http://www.princeton.edu/astro/news-events/public-events/astronomy-colloquia-2013/
- *Using astronomy to measure dark matter distributions and infer dark matter particle properties*, invited panelist, Dark Matter in Southern California Symposium, Caltech (January 2013). http://www.kiss.caltech.edu/cosponsored/dark-matter-sc2013/schedule.html

PUBLICATIONS LIST

Full refereed publications list (with clickable links to each paper in pdf format):

Past 5 years:

1. **Pelgrims et al. 2024:** The first degree-scale starlight-polarization-based tomography map of the magnetized interstellar medium
   Pelgrims, V., Mandarakas, N., Skalidis, R. Tassis, K., Panopoulou, G.V., **Pavlidou, V.** et al. 2024, A&A, 684, 162, https://arxiv.org/abs/2404.10821

2. **Tsouros et al. 2024:** Reconstructing Galactic magnetic fields from local measurements for backtracking ultra-high-energy cosmic rays
   Tsouros, A., Edenhofer, G., Ensslin, T., Mastorakis, M., **Pavlidou, V**. 2024, A&A, 681, 111, https://arxiv.org/abs/2303.10099

3. **Mandarakas et al. 2024:** Zero-polarization candidate regions for the calibration of wide-field optical polarimeters
   Mandarakas, N., Panopoulou, G.V., Pelgrims, V., Potter, S.B., **Pavlidou, V.** et al. 2024, A&A, 684, 132, https://arxiv.org/abs/2312.06435

4. **Kiehlmann et al. 2024:** Compact Symmetric Objects. II. Confirmation of a Distinct Population of High-luminosity Jetted Active Galaxies
   Kiehlmann, S., Readhead, A.C.S, O'Neill, S. et al. (including **Pavlidou, V.**) 2024, ApJ, 961, 241 https://arxiv.org/abs/2303.11359

5. **Readhead et al. 2024:** Compact Symmetric Objects. III. Evolution of the High-luminosity Branch and a Possible Connection with Tidal Disruption Events
   Readhead, A.C.S., Ravi, V., Blandford, R. et al. (including **Pavlidou, V**) 2024, ApJ, 961, 242, https://arxiv.org/abs/2303.11361

6. **Maharana et al. 2023:** Bright-moon sky as a wide-field linear polarimetric flat source for calibration
   Maharana, S., Kiehlmann, S., Blinov, D., Pelgrims, V., **Pavlidou, V.** et al. 2023, A&A, 679, 68, https://arxiv.org/abs/2305.04270

7. **Blinov et al. 2023:** The RoboPol Sample of Optical Polarimetric Standards
   Blinov, D. Maharana, S., et al. (including **Pavlidou, V.**) 2023, A&A, 677, 144, https://arxiv.org/abs/2307.06151

8. **Korkidis, Pavlidou & Tassis 2023:** Turnaround density evolution encodes cosmology in simulations
   Korkidis, G., **Pavlidou, V**. & Tassis, K. 2023, A&A, *674, 87* , https://arxiv.org/abs/2304.14434

9. **Skalidis, Tassis & Pavlidou 2023:** Analytic characterization of sub-Alfvenic turbulence energetics
   Skalidis, R., Tassis, K. & **Pavlidou, V.** 2023, A&A Letters, 672, 3, https://arxiv.org/abs/2209.14143

10. **Pelgrims et al. 2023:** Starlight-polarization-based tomography of the magnetized ISM: PASIPHAE's line-of-sight inversion method
    Pelgrims, V., Panopoulou, G. V., Tassis, K, **Pavlidou, V**., Basyrov, A., Blinov, D., Gjerløw, E., Kiehlmann, S., Mandarakas, N., Papadaki, A.,

Skalidis, R., Tsouros, A., Anche, R. M., Eriksen, H. K., Ghosh, T., Kypriotakis, J. A., Maharana, S., Ntormousi, E., Pearson, T. J., Potter, S. B., Ramaprakash, A. N., Readhead, A. C. S. & Wehus, I. K., 2023, A&A, 670, 164, https://arxiv.org/abs/2208.02278

11. **Mandarakas et al. 2023:** GRB 210619B optical afterglow polarization
Mandarakas, N., Blinov, D., Aguilera-Dena, D. R.; Romanopoulos, S., **Pavlidou, V.**, Tassis, K., Antoniadis, J., Kiehlmann, S., Lychoudis, A., Tsemperof Kataivatis, L. F. 2023, A&A, 670, 144, https://arxiv.org/abs/2208.13821

12. **Loudas et al. 2022:** Discriminating power of milli-lensing observations for dark matter models
Louds, N., **Pavlidou, V.**, Casadio, C., & Tassis, K. 2022, A&A, 668, 16, https://arxiv.org/abs/2209.13393

13. **Maharana et al 2022:** WALOP-South: A Four-Camera One-Shot Imaging Polarimeter for PASIPHAE Survey. Paper II -- Polarimetric Modelling and Calibration
Maharana, S.,Anche, R. M., Ramaprakash, A. N., Joshi, B., Basyrov, A., Blinov, D., Casadio, C., Deka, K., Eriksen, H. K.. Ghosh, T. Gjerlow, E., Kypriotakis, J. A., Kiehlmann, S., Mandarakas, N., Panopoulou, G. V., Papadaki, K., **Pavlidou, V**., Pearson, T. J., Pelgrims, V., Potter, S. B., Readhead, A. C. S. , Skalidis, R., Leithe S. T., Tassis, K., Wehus, I.K. 2022, JATIS 8, 038004, https://arxiv.org/abs/2208.12441

14. **Liodakis et al 2022:** The hunt for extraterrestrial high-energy neutrino counterparts
Liodakis, I., Hovatta, T., **Pavlidou, V.**, Readhead, A. C. S., Blandford, R. D., Kiehlmann, S., Lindfors, E., Max-Moerbeck, W., Pearson, T. J., Petropoulou, M. 2022, A&A, 666, A36 https://arxiv.org/abs/2208.07381

15. **Tassis & Pavlidou 2022:** Dancing with the stars: stirring up extraordinary turbulence in Galactic center clouds
Tassis, K., **Pavlidou, V**, 2022, A&A Letters, 662, 1, https://arxiv.org/abs/2205.06820

16. **O'Neill et al. 2022:** The Unanticipated Phenomenology of the Blazar PKS 2131 − 021: A Unique Super-Massive Black Hole Binary Candidate
O'Neill, S., Kiehlmann, S., Readhead, A. C. S., Aller, M. F., Blandford, R. D. , Liodakis, I., Lister, M. L., Mroz, P., O'Dea, C. P., Pearson, T. J., Ravi, V., Vallisneri, M., Cleary, K. A., Graham, M. J., Grainge, K. J. B., Hodges, M. W., Hovatta, T. , Lahteenmaki, A., Lamb, J. W., Lazio, T. J. W., Max-Moerbeck, W., **Pavlidou, V**., Prince, T. A., Reeves, R. A., Tornikoski, M., Vergara de la Para, P., Zensus, J. A. 2022, ApJL, 926, 35, https://arxiv.org/abs/2111.02436

17. **Peirson et al. 2022:** New Tests of Millilensing in the Blazar PKS 1413+135
Peirson, A. L., Liodakis, I., Readhead, A. C. S., Lister, M. L., Perlman, E. S., Aller, M. F., Blandford, R. D., Grainge, K. J. B., Green, D. A., Gurwell, M. A., Hodges, M. W., Hovatta, T., Kiehlmann, S., Lähteenmäki, A., Max-Moerbeck, W., Mcaloone, T., O'Neill, S., **Pavlidou, V**., Pearson, T. J., Ravi, V., Reeves, R. A., Scott, P. F., Taylor, G. B., Titterington, D. J., Tornikoski, M., Vedantham, H. K., Wilkinson, P. N., Williams, D. T., Zensus, J. A. 2022, ApJ, 927, 24 https://arxiv.org/abs/2201.01110

18. **Skalidis et al. 2021:** Why take the square root? An assessment of interstellar magnetic field strength estimation methods
Skalidis, R., Sternberg, J., Beattie, J. R., **Pavlidou, V**., Tassis, K. 2021, A&A, 656, 118 https://arxiv.org/abs/2109.10925

19. **Kiehlmann et al. 2021:** The time-dependent distribution of optical polarization angle changes in blazars
Kiehlmann, S., Blinov, D., Liodakis, I., **Pavlidou, V.,** Readhead, A. C. S., Angelakis, E., Casadio, C.. Hovatta, T., Kylafis, N., Mahabal, A., Mandarakas, N., Myserlis, I., Panopoulou, G. V., Pearson, T. J., Ramaprakash, A., Reig, P., Skalidis, R.; Slowikowska, A., Tassis, K., Zensus, J. A. 2021, MNRAS, 507, 225 https://arxiv.org/abs/2104.02622

20. **Casadio et al. 2021:** SMILE: Search for MIlli-LEnses
Casadio, C., Blinov, D., Readhead, A. C. S., Browne, I. W. A., Wilkinson, P. N.. Hovatta, T., Mandarakas, N., **Pavlidou, V**., Tassis, K., Vedantham, H. K., Zensus, J. A., Diamantopoulos, V., Dolapsaki, K. E., Gkimisi, K., Kalaitzidakis, G., Mastorakis, M., Nikolaou, K., Ntormousi, E., Pelgrims, V., Psarras, K 2021, MNRAS, 507, 6 https://arxiv.org/abs/2107.06896

21. **Pelgrims et al. 2021:** Evidence for Line-of-Sight Frequency Decorrelation of Polarized Dust Emission in Planck Data
Pelgrims, V., Clark, S. E., Hensley, B. S., Panopoulou, G. V., **Pavlidou, V.**, Tassis, K., Eriksen, H. K., Wehus, I. K. 2021, A&A, 647, 16 https://arxiv.org/abs/2101.09291

22. **Mandarakas et al. 2021:** Local alignments of parsec-scale AGN radiojets
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