Maciek Wielgus

Almost complete list of talks. Updated: July 2024

Professional talks, presentations, and seminars (incomplete before 2020)

- 123. 2024-07-24, Korea Astronomy and Space Science Institute, Daejeon, South Korea *Studying black holes with space VLBI* (invited talk),
- 122. 2024-07-19, COSPAR 2024: 45th Scientific Assembly, Busan, South Korea *Diagnosing horizon-scale plasma with the recent observations of Sagittarius A* and M87** (invited talk),
- 121. 2024-07-14, COSPAR 2024: 45th Scientific Assembly, Busan, South Korea *Rapid multi-wavelength variability in flaring Sagittarius A** (invited talk),
- 120. 2024-06-20, Physics Department, Ecole Normale Supérieure, Paris, France *We'll test strong gravity with space radiointerferometry* (invited talk),
- 119. 2024-06-13, Paris Observatory, Meudon, France *Sagittarius A* revealed* (invited seminar),
- 118. 2024-05-29, Institute of Astronomy, UNAM, Mexico City, Mexico *Sagittarius A* revealed* (invited seminar),
- 117. 2024-05-23, EHT Collaboration meeting, Mexico City, Mexico Diagnosing the accretion flow in Sagittarius A* with ALMA polarimetry
- 116. 2024-05-14, Institute of Radio Astronomy and Astrophysics, Morelia, Mexico *Sagittarius A* revealed* (invited seminar),
- 115. 2024-05-02, University of Wuerzburg, Germany *News from the M87* black hole* (invited seminar),
- 114. 2024-03-11, ASIAA, Taipei, Taiwan *Radio-bright future of studying black holes* (invited seminar),
- 113. 2024-02-19, University of Mississippi, Oxford, USA *News from the M87* black hole* (invited seminar),
- 112. 2024-02-07, Nicolaus Copernicus Astronomical Center, Warsaw, Poland *News from the M87* black hole* (invited seminar),
- 111. 2023-11-30, 25th RAGtime Workshop, Opava, Czechia *Primordial black holes in the Galaxy dark matter* (keynote conference talk),
- 110. 2023-11-29, 25th RAGtime Workshop, Opava, Czechia *Final results of the first EHT observations of M87 the end of the saga* (keynote conference talk),
- 109. 2023-11-13, Galaphys Workshop, Paris Observatory, France (invited talk, online), *Studying black holes at the horizon-scale (from Bonn to Paris*),
- 108. 2023-10-19, Narayan's group meeting, Center for Astrophysics, Cambridge, USA (seminar) *Are we really observing hot spots orbiting Sagittarius A*?*,
- 107. 2023-10-16, BHI/SAO/EHT Group Meeting, Cambridge, USA Some research updates and invitations to discussion/collaboration,
- 106. 2023-09-22, M2FINDERS and Beyond: Magnetic Fields around Black Holes, Ringberg Castle, Germany *Physical conditions on the event horizon scale*,
- 105. 2023-07-17, EHT Polarization WG Meeting, online *Internal Faraday screen of Sagittarius A**,
- 104. 2023-07-14, EAS Meeting 2023, Krakow, Poland *The inner life of blazars revealed with the EHT* (invited conference talk),
- 103. 2023-07-13, EAS Meeting 2023, Krakow, Poland Event horizon scale variability of Sagittarius A* probed with millimeter polarized light curves,
- 102. 2023-07-12, EAS Meeting 2023, Krakow, Poland *Puffy disks: a numerical model of mildly sub-Eddington accretion,*

- 101. 2023-06-27, EHT Collaboration meeting, Taichung, Taiwan *ALMA light curves of Sagittarius A* from 86 to 230 GHz*,
- 100. 2023-05-25, Silesian University in Opava, Czechia *Observing Sagittarius A* with ALMA* (invited seminar, online),
- 99. 2023-05-09, Goethe University, Frankfurt, Germany *Observing Sagittarius A* with ALMA* (invited seminar),
- 98. 2023-05-02, Radboud University, Nijmegen, Netherlands *Observing Sagittarius A* with ALMA* (invited seminar),
- 97. 2023-04-18, University of Geneva, Switzerland *Observing Sagittarius A* with ALMA and the EHT* (invited seminar),
- 96. 2023-03-16, ngEHT Testing Gravity working group telecon *A very basic intro to the eht-imaging library* (online tutorial),
- 95. 2023-03-14, University of Valencia, Spain *Observing Sagittarius A* with ALMA* (invited seminar),
- 94. 2023-02-21, World Copernican Congress, Toruń, Poland *Imaging black holes with the Event Horizon Telescope* (invited conference talk),
- 93. 2023-02-13, BHI/SAO/EHT Group Meeting, Cambridge, USA *Photon ring of a black hole: from theory to observations* (seminar),
- 92. 2023-02-10, Improving Black Hole Accretion Models with Plasma Theory workshop, Princeton Uni., USA *Observing Sagittarius A* with ALMA* (invited conference talk),
- 91. 2023-01-12, Reconnection and Sgr A* flares workshop, Paris Observatory, Meudon, France *Orbital motion near Sgr A* from ALMA data* (invited conference talk),
- 90. 2022-11-30, Center for Theoretical Physics, Warsaw, Poland *First image of the black hole shadow in the Galactic Center* (invited seminar),
- 89. 2022-11-29, Astronomical Observatory of the University of Warsaw, Poland *Event Horizon Telescope observations of Sagittarius A** (invited seminar),
- 88. 2022-11-28, Piwnice Astronomical Observatory, Poland *Observing hot spots orbiting Sagittarius A* with ALMA* (invited seminar),
- 87. 2022-11-24, EHT Europe-Africa plenary meeting (online) *Resolving the inner parsec of quasars with the EHT* (invited talk),
- 86. 2022-11-10, Chandra X-ray Space Telescope Operations Control Center, Burlington, USA *Observing hot spots orbiting Sagittarius A* with ALMA and Chandra* (invited seminar),
- 85. 2022-11-02, High Energy Astrophysics Division at CfA | Harvard & Smithsonian, Cambridge, USA *Observing hot spots orbiting Sagittarius A* with ALMA* (invited seminar),
- 84. 2022-10-31, BHI/SAO/EHT Group Meeting, Cambridge, USA *Observing hot spots orbiting Sagittarius A* with ALMA* (seminar),
- 83. 2022-10-24, Princeton Gravity Initiative, Princeton University, USA *Observing hot spots orbiting Sagittarius A* with ALMA* (seminar),
- 82. 2022-10-11, Geoplanet Doctoral School, Warsaw, Poland
 Seeing the invisible: Imaging the supermassive black hole in the center of our Galaxy (invited inaugural lecture),
- 81. 2022-10-11, 24th RAGtime Workshop, Opava, Czechia *Observing hot spots orbiting Sagittarius A* with ALMA* (keynote conference talk),
- 80. 2022-10-04, next generation EHT science of binaries telecon *Observing hot spots orbiting Sagittarius A* with ALMA* (invited virtual seminar),
- 79. 2022-09-21, EHT-GRAVITY Meeting, Nijmegen, Netherlands *Observing hot spots orbiting Sagittarius A* with ALMA* (invited conference talk),
- 78. 2022-09-14, 31st Texas Symposium on Relativistic Astrophysics, Prague, Czechia *Observing hot spots orbiting Sagittarius A* with ALMA* (conference talk),
- 77. 2022-09-06, 22nd Polish-Slovak-Czech Optical Conference, Wojanow, Poland *Event Horizon Telescope and the progress in very long baseline interferometry* (invited plenary talk),

- 76. 2022-08-22, Max Planck Institute for Extraterrestrial Physics, Garching, Germany *Polarized millimeter light curves of Sagittarius A** (invited seminar),
- 75. 2022-07-21, Instituto de Astrofísica e Ciências do Espaco, Portugal Event Horizon Telescope, black hole shadow and photon rings (invited lecture at the internship program),
- 74. 2022-07-18, COSPAR 2022: 44th Scientific Assembly, Athens, Greece *Photon ring of a black hole: from theory to observations* (conference talk),
- 73. 2022-07-07, Paris Observatory, France
 First image of the black hole shadow in Sagittarius A* (invited seminar),
- 72. 2022-07-06, CMB-S4 Workshop, University of Illinois Urbana-Champaign, USA (virtual) *Variability of Sagittarius A* at millimeter wavelengths* (invited conference talk),
- 71. 2022-06-29, EAS Annual Meeting, Valencia, Spain *Variability of the Sagittarius A* millimeter light curves* (conference talk),
- 70. 2022-06-21, EHT Collaboration Meeting, Granada, Spain *Sgr A* polarized ALMA lightcurves* (conference talk),
- 69. 2022-06-09, KIPAC, Stanford University, USA *First image of the black hole shadow in Sagittarius A** (invited seminar, virtual),
- 68. 2022-06-08, Nicolaus Copernicus Astronomical Center, Warsaw, Poland *First image of the black hole shadow in Sagittarius A** (invited seminar),
- 67. 2022-06-06, AGN Seminar at NASA Goddard Space Flight Center, USA *First image of the black hole shadow in Sagittarius A** (invited seminar, virtual),
- 66. 2022-06-02, Event Horizon Telescope Polarimetry Working Group telecon *Polarized millimeter light curves of Sagittarius A** (EHT working group talk),
- 65. 2022-05-20, 5th Black Hole Initiative Conference, Harvard University, USA *Variability of the Sagittarius A* millimeter light curves* (invited talk),
- 64. 2022-02-17, AGN Seminar at NASA Goddard Space Flight Center, USA *Observing AGN sources with the EHT* (invited seminar, virtual),
- 63. 2021-12-09, Max Planck Institute for Radio Astronomy, Bonn, Germany (invited seminar) *Black hole shadows, photon rings and critical curves can we test gravity with the EHT images?*,
- 62. 2021-11-03, next generation EHT Virtual Conference (virtual conference talk) *Photon rings of spherically symmetric black holes and robust tests of non-Kerr metrics,*
- 61. 2021-10-20, Narayan's group meeting, Center for Astrophysics, Cambridge, USA (seminar) *Photon rings of spherically symmetric black holes and robust tests of non-Kerr metrics,*
- 60. 2021-09-16, Polish Astronomical Society annual meeting, Szczecin, Poland *Event Horizon Telescope* (virtual conference talk),
- 59. 2021-09-07, 23rd RAGtime Workshop, Opava, Czechia Current and future tests of gravity with black hole shadows (invited conference talk),
- 58. 2021-07-22, Instituto de Astrofísica e Ciências do Espaco, Portugal *Event Horizon Telescope, black hole shadow and photon rings* (lecture at the internship program),
- 57. 2021-07-09, 16th Marcel Grossmann Meeting (virtual, invited conference talk) *Shadows of the past, shadows of the future,*
- 56. 2021-07-06, 16th Marcel Grossmann Meeting (virtual, invited conference talk) *Would we know a wormhole if we saw one?*,
- 55. 2021-07-05, 16th Marcel Grossmann Meeting (virtual, invited conference talk) *Event Horizon Telescope Paper VII: imaging the polarized emission around M* 87*,
- 54. 2021-06-29, EAS Annual Meeting 2021 (virtual, poster)

 Studying dynamics of the innermost part of the accretion flow in M87 with the EHT,
- 53. 2021-05-06, Los Alamos National Laboratory, Center for Theoretical Astrophysics, USA *Resolving the polarized emission from the core of the M87 galaxy with the EHT* (inv. seminar),
- 52. 2021-04-29, Silesian University in Opava, Czechia (invited seminar) *Polarized emission around the M87 supermassive black hole,*

- 51. 2021-04-08, Paris Observatory, France (invited seminar, virtual)

 Resolving the polarized emission from the core of the M87 galaxy with the EHT,
- 50. 2021-04-05, SLAC Seminar, Stanford University, USA (invited seminar, virtual) *Polarized emission around the M87 supermassive black hole,*
- 49. 2021-04-01, Xiamen University, China (invited seminar, virtual) Resolving the polarized emission from the core of the M87 galaxy with the EHT,
- 48. 2021-03-12, Institute of Theoretical Physics & Astrophysics, Masaryk University, Brno, Czechia *Probing space time geometry with the Event Horizon Telescope* (invited seminar, virtual),
- 47. 2021-03-09, Faculty of Mechatronics, Warsaw University of Technology, Poland *Introduction to Bayesian methods of parameters estimation* (lecture and workshop),
- 46. 2021-03-03, Fudan University, Shanghai, China *Studying compact objects in the age of black hole images* (invited seminar, virtual),
- 45. 2021-02-25, Science at the Horizon: the Next-Generation EHT Conference (virtual) *Photon ring signature of non-Kerr spacetimes* (conference talk),
- 44. 2021-02-24, Institute of Astronomy and Astrophysics, Academia Sinica, Taiwan *Studying compact objects in the age of black hole images* (invited seminar, virtual),
- 43. 2021-01-11, Tsinghua University, Beijing, China *The radio-bright future of studying black holes* (invited seminar, virtual),
- 42. 2020-12-22, Shanghai Observatory, China *Studying compact objects in the age of black hole images* (invited seminar, virtual),
- 41. 2020-12-15, 4th Black Hole Initiative Conference, Harvard University, USA *Monitoring the Morphology of M87* in 2009-2017 with the EHT* (conference talk, virtual),
- 40. 2020-10-28, Institute of Physics, University of Szczecin, Poland *Monitoring M87* in 2009-2017 with the EHT* (invited seminar),
- 39. 2020-10-27, National Centre for Nuclear Research Astrophysics, Swierk, Poland *Monitoring M87* in 2009-2017 with the EHT* (invited seminar),
- 38. 2020-09-21, Cologne / Prague Conference: Exploring of the Universe (virtual) *Monitoring M87 in 2009-2017 with the Event Horizon Telescope* (conference talk),
- 37. 2020-08-12, Astronomical Institute of the Czech Academy of Sciences, Prague, Czechia *Monitoring the Morphology of M87 in 2009-2017 with the EHT* (seminar),
- 36. 2020-05-06, Nicolaus Copernicus Astronomical Center, Warsaw, Poland *Puffy accretion disks and how to find them* (invited seminar),
- 35. 2020-03-11, Nicolaus Copernicus Astronomical Center, Warsaw, Poland *Modeling* 2009-2013 observations of M87* with an asymmetric ring (invited seminar),
- 34. 2020-02-27, Silesian University, Opava, Czechia *Modeling* 2009-2013 observations of M87* with an asymmetric ring (invited seminar),
- 33. 2020-02-18, Radboud University, Nijmegen, Netherlands

 Modeling 2009-2013 observations of M87* with an asymmetric ring (invited seminar),
- 32. 2019-11-07, College of Charleston, USA *What can we learn from the first image of a black hole?* (invited seminar),
- 31. 2019-11-01, NEROC Symposium, MIT Haystack Observatorium, USA *Event Horizon Telescope expansion plans* (conference talk),
- 30. 2019-10-23, New Horizons in Galactic Center Astronomy and Beyond, Yokohama, Japan *Analyzing time variability of Sgr A* in the Event Horizon Telescope data* (conference talk),
- 29. 2019-10-11, IAU 356, Addis Ababa, Ethiopia *Observing AGN sources with the Event Horizon Telescope* (conference talk),
- 28. 2019-09-27, University of Waterloo, Canada *Optically thick accretion: from theory to the most recent results* (invited seminar),
- 27. 2019-09-18, 21st RAGtime Workshop, Opava, Czechia *Probing GR with the Event Horizon Telescope* (invited conference talk),

- 26. 2019-05-21, 3rd Black Hole Initiative Conference, Harvard University, USA *EHT data set reduction and calibration* (conference talk),
- 25. 2019-05-15, Department of Physics, University of California in Santa Barbara, USA *First results from the Event Horizon Telescope* (invited talk),
- 24. 2019-05-14, KIPAC, Stanford University, USA *First results from the Event Horizon Telescope* (invited seminar),
- 23. 2019-05-09, 1st CTA Science Symposium, Bologna, Italy *Event Horizon Telescope* (conference talk),
- 22. 2019-05-03, University of Amsterdam, Pannekoek Institute, Netherlands *First results from the Event Horizon Telescope* (invited talk),
- 21. 2019-04-18, Paris Observatory, France First results from the Event Horizon Telescope (invited seminar),
- 20. 2019-04-16, Astronomy Department, Yale University, USA *First EHT results* (invited seminar),
- 19. 2019-04-12, Astronomy Department, Tufts University, USA *First results from the Event Horizon Telescope* (invited seminar),
- 18. 2018-02-01, CfA, Harvard & Smithsonian, USA *Studying variability of Sgr A* with the EHT* (colloquium),
- 17. 2017-10-03, Black Hole Initiative, Harvard University, USA *Levitating atmospheres of luminous neutron stars* (colloquium),
- 16. 2017-04-25, Students' Astronomy Club KNAstr at the University of Warsaw, Poland *Event Horizon Telescope* (talk),
- 15. 2016-09-30, ZARM, Bremen University, Germany *Transsonic accretion* (lecture),
- 14. 2016-04-19, Silesian University in Opava, Czechia *Eddington Capture Sphere* (seminar),
- 13. 2015-09-15, SPIE Correlation Optics conference, Chernivtsi, Ukraine *The analytic signal in fringe pattern processing* (conference talk),
- 12. 2014-12-09, Meeting with Copernicus & Hevelius: confrontations with relat. astroph., Krakow, Poland *Levitating super-Eddington atmospheres* (conference talk),
- 11. 2014-08-26, IAU 312, Beijing, China *Levitating atmospheres of luminous neutron stars* (conference talk),
- 10. 2013-12-10, SPIE Micro+Nano Materials, Devices, and Systems, Melbourne, Australia *Nanocrystallic thin films statistical structural analysis by the automatic image processing* (poster),
- 9. 2013-09-10, Fringe 2013, 7th International Workshop, Stuttgart, Germany *Filtering ESPI Fringe Images with Non-local Means Algorithm* (conference talk),
- 8. 2013-07-15, Narayan's group meeting, Center for Astrophysics, Cambridge, USA (seminar) *Eddington capture sphere around luminous stars*,
- 7. 2013-06-24, Narayan's group meeting, Center for Astrophysics, Cambridge, USA (seminar) *On some recent and not so recent developments in signal and image analysis,*
- 6. 2013-04-03, MRS Spring Meeting & Exhibit, San Francisco, USA (conference talk) Enhanced Measurements of Displacements and Strains in Quasiperiodic Nanostructures,
- 5. 2012-10-24, Nicolaus Copernicus Astronomical Center, Warsaw, Poland *Eddington capture sphere around luminous stars* (seminar),
- 4. 2012-09-19, 7th PhD Students and Young Scientists Conference, Warsaw University of Technology, Poland *Midpoint-based bidimensional empirical mode decomposition*,
- 3. 2012-08-23, SPIE Adv. Topics in Optoel., Microel. and Nanotech., Constanta, Romania (conf. talk) *Continuous Wavelet Transform for D-Space Distribution Analysis in Nanocrystallic Materials*,
- 2. 2011-09-20, 6th PhD Students and Young Scientists Conference, Warsaw University of Technology, Poland *Fringe pattern analysis with bidimensional empirical mode decomposition*,

1. 2010-06-17, 7th Partial Differential Equations Forum, Bedlewo, Poland (poster) *Perona-Malik equation in image analysis*

Outreach talks and public lectures given (incomplete before 2020)

- 19. 2023-09-02, Astronomy Club Almukantarat 40th Anniversary, Frombork, Poland *Sagittarius A*: najmroczniejszy sekret Galaktyki*,
- 18. 2022-12-09, Astronomy Club at Sacred Heart Preparatory, Atherton, USA Seeing the invisible: Imaging the supermassive black hole in the center of our Galaxy,
- 17. 2022-09-13, 31st Texas Symposium on Relativistic Astrophysics, Prague, Czechia (public talk) *Seeing the invisible: Imaging the supermassive black hole in the center of our Galaxy*,
- 16. 2022-05-17, Harvard University Science Center, Cambridge, USA *The EHT: Breaking News from the Center of the Milky Way* (public talk and panel discussion),
- 15. 2021-11-17, XL Żeromski High School, Warsaw, Poland *Parę słów o astrofizyce i pracy naukowej* (invited talk for high school students, in Polish),
- 14. 2021-07-16, Almukantarat Astronomy Club Summer Camp, Zalecze Wielkie, Poland *Sezon na czarne dziury* (a lecture for a high school astronomy club, in Polish, English: *Season for black holes*),
- 13. 2021-03-29, N. Copernicus Astronomy Center: Meetings with Astronomy (outreach lecture series) *Polaryzacja obrazu czarnej dziury w M87* (in Polish, English *Polarization of the image of the M87 black hole*),
- 12. 2021-01-21, Copernicus Science Center, Warsaw, Poland *Prosto z nieba: sezon na czarne dziury* (public lecture in Polish, virtually on YouTube),
- 11. 2020-11-30, Photo: Science/ Photography and Scientific Discourses Conference, Prague, Czechia *Event Horizon Telescope and Black Hole Images* (keynote talk at a photographic conference),
- 10. 2020-09-20, N. Copernicus Astronomy Center: Meetings with Astronomy (outreach lecture series) *Teleskop Horyzontu Zdarzeń* (in Polish, English: *Event Horizon Telescope*),
- 9. 2020-03-04, Silesian University in Opava, Czechia *Shadow of a black hole* (public lecture),
- 8. 2019-11-06, Mellow Mushroom pub, Charleston, USA *The insider's tale of the Event Horizon Telescope* (Astronomy on Tap pub talk),
- 7. 2019-09-23, PLNOG 23, Cracow, Poland (invited lecture at an IT conference, in Polish) *Biblioteka EHT-imaging, regularized maximum likelihood i pierwszy obraz czarnej dziury,*
- 6. 2019-09-14, PyCon PL 2019, Zawiercie, Poland (keynote lecture at an IT conference) *First image of a black hole: Python DIY*,
- 5. 2019-07-31, Polish Scientific Network in Boston meeting, MIT, Cambridge, USA *Imaging a black hole with the Event Horizon Telescope* (popular talk),
- 4. 2019-04-27, Copernicus Science Center, Warsaw, Poland *Teleskop Horyzontu Zdarzeń* (public talk, in Polish),
- 3. 2019-04-15, Harvard University Science Center, USA (public talk and panel discussion) *Photographing Black Holes: First Results from the Event Horizon Telescope*
- 2. 2017-04-10, N. Copernicus Astronomy Center: Meetings with Astronomy (outreach lecture series) *Teleskop Horyzontu Zdarzeń* (in Polish, English: *Event Horizon Telescope*)
- 1. 2016-05-23, N. Copernicus Astronomy Center: Meetings with Astronomy (outreach lecture series) *Testy ogólnej teorii względności* (in Polish, English: *Tests of general relativity theory*)