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- **Strongly motivated, reliable individual**
 - **Punctual and responsible with good interpersonal and communications skills**
 - **Hardworking and willing to learn new things**

RESEARCH INTEREST

- Supermassive black holes, Active Galactic Nuclei (AGN) physical structure and kinematics, AGN evolution and surveys, high-energy astrophysics, modelling of accretion disks, Quasars: physical structure and processes around them

EDUCATION

- **University of Białystok** Poland
PhD in Physics 2016 – 2021
- **Warsaw University** Poland
Master of Science in Chemistry 2013 – 2015
- **University of Białystok** Poland
Bachelor in Chemistry 2010 – 2013

PROJECTS

- **Nature of weak emission-line quasars**,: Ph.D thesis, supervisor: dr hab. Marek Nikolajuk, prof. UwB (defended: 10.2021)
- **Broadband spectrum of Active Galactic Nuclei**: 2018 - Prof. dr hab. Bożena Czerny, Center for Theoretical Physics of the Polish Academy of Sciences
- **Far-infrared bright/faint quasars**: February 2020 - May 2020 - dr Evanthia Hatziminaoglou, European Southern Observatory

PUBLICATIONS

- M. Marculewicz and M. Nikolajuk - "*Black Hole Masses of Weak Emission Line Quasars Based on the Continuum Fit Method*" – The Astrophysical Journal, Volume 897, Number 2 (2020)
- M. Marculewicz and M. Nikolajuk - "*Models of Continuum of Weak Emission-Line Quasars*" , Proceedings of the Polish Astronomical Society, Volume 10, 243-247 (2020)
- Cherenkov Telescope Array Consortium - "*Sensitivity of the Cherenkov Telescope Array for probing cosmology and fundamental physics with gamma-ray propagation*",(2020)
- Cherenkov Telescope Array Consortium - "*Pre-construction estimates of the Cherenkov Telescope Array sensitivity to a dark matter signal from the Galactic centre*", (2020)
- A. Acharyya et al. - "*Monte Carlo studies for the optimisation of the Cherenkov Telescope Array layout*", Astroparticle Physics, 111, 35-53, (2019)
- M. Ostrowski et al. - "*Progress of the Cherenkov Telescope Array project in Poland*", Proceedings of the Polish Astronomical Society, vol. 7, 343-348 (2018)
- M. Giedyk et al. - "*Photoinduced Vitamin B12-Catalysis for Deprotection of (Allyloxy)arenes*", Organic Letters, 19, 10, 2670-2673, (2017)

EXPERIENCE

- **Cherenkov Telescope Array** member of the Polish consortium
duty shifts, SST-1M telescope prototype in Cracow Oct 2017 - Present
- **Gravitational waves from accretion disk**
supervisor: Prof. dr hab. Tomasz Bulik, Institute of Astronomy, Warsaw Dec 2016 - Mar 2019
- **Enantioselective synthesis of unnatural Amino Acids**
supervisor: dr hab. Sebastian Stecko, Institute of Organic Chemistry, PAS Warsaw Jan 2016 - Jul 2016
- **Catalytic properties of Vitamin B12**
supervisor: Prof. dr hab. Dorota Gryko, Institute of Organic Chemistry, PAS Warsaw Jul 2013 - Jul 2015

ATTENDANCES IN CONFERENCES, WORKSHOPS AND SCHOOLS

- **August 2021:** Chandra Data Science
- **January 2021:** 237th Meeting of the American Astronomical Society
- **October 2020:** Accretion 2020 at Fudan, Fudan University
- **October 2020:** Cherenkov telescope, Consortium General Online Meeting October 2020
- **October 2020:** KITP Conference, The Frontiers of Event Horizon Scale Accretion
- **September 2020:** La Silla Paranal Users Workshop, Optimising data exploitation, ESO online workshop
- **August - September 2020:** Astro Hack Week workshop (I started three independent projects which are in the development phase)
- **August 2020:** 8th AtomDB Workshop and Advanced Spectroscopy School, hosted by the Harvard & Smithsonian Center for Astrophysics
- **July 2020:** Compact Objects and Energetic Phenomena in the Multi-Messenger Era, virtual mini-conference
- **June - September 2020:** next-generation Very Large Array Science Advisory Council cycle of weekly online talks
- **September 2019:** 39th Polish Astronomical Society Assembly, Olsztyn - oral contribution "Nature of weak emission-line quasars"
- **August 2019:** Quasars in crisis 2019, Edinburgh - poster presentation "Models of continuum of weak emission-line quasars"
- **July 2018 - August 2018:** internship in the Center for Theoretical Physics of the Polish Academy of Sciences - "Broadband spectrum of Active Galactic Nuclei"
- **June 2018:** 34th IAP Conference: Massive black holes in evolving galaxies: from quasars to quiescence, Paris - poster presentation "SED of SDSS J094533.99+100950.1 quasar"
- **February 2018:** 48th Saas-Fee course: Black hole formation and growth - poster presentation "Models of continuum of SDSS J094533.99+100950.1 quasar"
- **June 2017:** Fermi Summer School 2017 workshop, organized by NASA and University of Delaware - student talk "Weak emission-line quasars (WLQ)"
- **September 2017, April 2018:** attendance in two meetings of Consortium of Cherenkov Telescope Array, Cracow
- **February 2017:** the workshop of ESO (European Southern Observatory) in CAMK, Warsaw

TEACHING

- **2020:** Astronomy and cosmology, lecture and laboratory, University of Białystok
- **2019:** Astronomy and cosmology, lecture and laboratory, University of Białystok
- **2018:** Astronomy and cosmology, lecture and laboratory, University of Białystok
- **2017:** Introduction to Linux, laboratory, University of Białystok

MISCELLANEA

- **2019:** "Reality of stars - evolution from birth to death", oral contribution with honors, XVII Festival of science and art
- **2013 - 2015:** Member of Chemistry Students Fulleren University of Warsaw
- **2010 - 2013:** Member of Chemistry Students Pozyton, University of Białystok
- **2016 - 2020:** Animator and tutor in events for kids and students in University of Białystok
- **2016 - 2020:** Animator in events for kids and students in University of Warsaw

PROGRAMMING SKILLS

- **Languages:** Python, Fortran
- **Python packages:** Pandas, Matplotlib, Numpy, Scipy, astropy
- Unix packages, Latex, Microsoft packages