Name: Nadejda Blagorodnova Mujortova

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URL for web site: https://nblago.github.io/

Research positions

2022 – Distinguished researcher

University of Barcelona, Barcelona, Spain

2018 – 2022 VENI Postdoctoral fellow

Radboud University, Nijmegen, The Netherlands Jul. 2021 – Nov. 2022 Maternity leave Nov. 2018 – Apr. 2019 Maternity leave

2015 – 2018 Postdoctoral scholar

California Institute of Technology, Pasadena, CA, USA

2012 – 2015 Ph.D., student in Astrophysics

Institute of Astronomy, Cambridge, UK

Industry positions

2009 – 2012 Scientific Software Test Manager for the Gaia ESA mission

Faculty of Physics, Barcelona, Spain

2007 – 2009 Consultant in information technologies

Synergic Partners, S.L., Barcelona, Spain

Education

2012 – 2015 **Ph.D., Astrophysics**

Institute of Astronomy, Cambridge, UK Thesis: Characterizing the Gaia Transient Sky

Supervisor: Dr. Nicholas A. Walton

2009 – 2011 M.S., Astrophysics, particle physics and cosmology

Faculty of Physics, Barcelona, Spain

2008 M.S. in Information Technologies

Barcelona School of Informatics, Barcelona, Spain

2003 – 2008 B.A., Computer Science

Barcelona School of Informatics, Barcelona, Spain

Prize fellowships and awards

2022 SGR-Cat-2021, Agency for Management of University and Research (co-I, 36.000 €)

2022 European Research Council (ERC) Starting Grant (PI, 1.489.225 €)

2021 Maria Zambrano Fellowship (declined)

2018 Innovational Research Incentives Scheme VENI fellowship (PI, 250.000 €)

2015 Finnish Centre for Astronomy (FINCA) fellowship (declined)
2015 European Science Foundation grants for exchange visits (6.000€)
2012 Marie Curie Early Stage Researcher fellowship (PI, 150.000 €)

Gaia Research for European Astronomy Training - Initial Training Network

(GREAT ITN)

2001 National Chemistry Olympiad, Gijon, Spain - silver tier

Selected talks - conferences and workshops

July 2023	Invited Talk: European	Week of Astronomy a	nd Snace Science	Krakow Poland
JUIV ZUZJ	IIIVILEU TAIK. EULODEALI	vveek of Astronomiv a	HU SDACE SCIENCE.	NIAKOW, FUIAIIU

Nov 2022 **Invited Talk**: Supervirtual, online Oct 2022 Poster: LSST@EU4, Rome, Italy

Jul 2022 Talk: Gap transients workshop, Sexten, Italy

Jun 2022 Invited Talk: Physics and Astrophysics of Common Envelope Workshop, Los Alamos, USA

Jul 2021 Talk: EAS virtual meeting, Leiden, Netherlands

May 2021 Talk: NAC (Nederlandse Astronomenconferentie) virtual meeting, Leiden, Netherlands

Jul. 2020 Talk: EAS virtual meeting, Leiden, Netherlands

Oct. 2019	Invited talk: Royal Astronomical Society, London, UK
Sep. 2019	Talk: ESO workshop "The extragalactic explosive Universe", Garching, Germany
Jun 2019	Talk: European Week of Astronomy and Space Science, Lyon, France
May 2019	Talk: NAC (Nederlandse Astronomenconferentie), Groningen, The Netherlands
Feb. 2019	Invited Talk: Cosmic Beacons workshop, Sexten, Italy
Sep. 2018	Invited Talk: Caltech-Swinburne data science workshop, Pasadena, USA
Sep. 2018	Talk: Keck Science Meeting, Pasadena, USA
Jul. 2017	Invited talk: Unveiling the Physics Behind Extreme AGN Variability, ST. Thomas, US. Virgin
	Islands
July 2017	Talk: European Week of Astronomy and Space Science, Prague, Czech Republic
Jan. 2017	Talk: 229th American Astronomical Society meeting, Grapevine, USA
Nov. 2015	Talk: Jerusalem TDE Workshop
Nov. 2015	Talk: Gaia Science Alerts Workshop, Liverpool, UK
Sep. 2014	Talk: Gaia Science Alerts Workshop, Warsaw, Poland
Aug. 2014	Talk: CAASTRO Annual Scientific Conference, Coffs Harbour, Australia
Jul. 2014	Talk: European Week of Astronomy and Space Science, Geneva, Switzerland
Feb. 2014	Talk: Gaia-PESSTO GREAT ESF Workshop, Belfast, UK
Sep. 2013	Invited talk: Workshop on High Energy Tidal Disruption Events, Favignana, Italy
Jul. 2012	Talk: European Week of Astronomy and Space Science, Rome, Italy

Selected colloquium and seminars Jun 2023 Invited seminar, ICE-CSIC, Cerdanyola del Vallès, Spair

Invited seminar. ICE-CSIC, Cerdanyola del Vallès, Spain
Invited colloquium. Astronomical Observatory of the University of Warsaw, Warsaw, Poland
Invited seminar. Liverpool John Moores University, Liverpool, United Kingdom
Invited seminar. Winter meeting ICCUB. University of Barcelona, Barcelona, Spain
Seminar: University of Barcelona, Barcelona, Spain
Seminar: Radboud University, Nijmegen, The Netherlands (online)
Invited seminar: Center for Computational Astrophysics, Flatiron Institute, New York, USA
(online)
Seminar: Radboud University, Nijmegen, The Netherlands (online)
Invited colloquium: Nicolaus Copernicus Astronomical Center, Toruń, Poland (online)
Invited colloquium: Astronomical Institute Anton Pannekoek, Amsterdam, NL (online)
Invited seminar: Florida State University, USA (online)
Invited colloquium: Charles University, Prague, CZ
Invited seminar: Ondrejov Observatory, Ondrejov, CZ
Invited colloquium: UCL, London, UK
Invited colloquium: University of Novo Gorica, Novo Gorica, Slovenia
Seminar: SRON, Utrecht, The Netherlands
Invited Colloquium: Radboud University, Nijmegen, The Netherlands
Seminar: Technion – Israel Institute of Technology, Haifa, Israel
Seminar: Faculty of Physics, University of Barcelona, Spain
Seminar: Liverpool John Moores University, Liverpool, UK
Seminar: Caltech, Pasadena, USA
Invited seminar: University of Washington, Seattle, USA
Invited seminar: San Diego State University, San Diego, USA
Seminar: Faculty of Physics, University of Barcelona, Spain
Seminar: Institute of Astronomy, Cambridge, UK
Seminar: Institute of Astronomy, Cambridge, UK
Seminar: Tuorla Observatory, University of Turku, Finland
Invited colloquium: University of Warwick, Coventry, UK
Seminar: Astronomical Observatory, University of Warsaw, Warsaw, Poland
Seminar: Faculty of Physics, University of Barcelona, Barcelona, Spain

Press releases

Sep. 2016	"New observations of rare cosmic explosion provide hints about stars' companionship", for
	Blagorodnova et. al. 2017, GROWTH press
Sep. 2014	"Gaia discovers its first supernova", European Space Agency news

Awarded observing time

2023 JWST - 10.14h (co-l), Calar Alto 3.5, 2.2m - 6h, 16.5h (PI) 2022 GTC - 10 hours (co-l) 2021 **SOFIA** – 1.3 hours (co-l), **VLT** – 2 hours (PI), **LT** – 17.5 hours (co-l) 2020 GTC - 16.5 hours (co-l), VLT - 12 hours (co-l), LT - 17.5 hours (co-l) 2019 Keck – ½ night (PI) 2018 LCO – 42 hours (PI), Keck – 3 nights (PI) 2017 HST GO Cycle 25 – 70 orbits (co-I), Keck – 1.25 nights (PI) + 1 night (co-I) 2016 **HST** DDT Cycle 23 – 5 orbits (co-I), **Keck** – 1 night (PI) + 0.5 nights (co-I), **P200** – 3 nights (PI), **P60** – 35 h (PI), **P48** – 24 h (PI), **VLT** – 5h (co-I) 2014 Liverpool Telescope – 92 h (co-l)

Observing experience

Keck I and Keck 2 26 nights. Instruments: LRIS, DEIMOS, NIRC2, NIRSPEC, ESI, OSIRIS

P200 10 nights. Instruments: DBSP, WIRC

WHT 3 nights. Instruments: ACAM

NTT 16 nights. Instruments: EFOSC2, SOFI

NOT 3 nights. Scheduling of Target of Opportunity observations

Copernico Telescope (1.8m)5 nights. Instruments EFOSC2VLT2 hours. Instruments: XShooter

Supervision, teaching and mentoring of students

Feb 2022 – present Supervising a "Treball Final de Grau", University of Barcelona
Oct 2022 – present Lecturer in "Observational Astronomy" course, University of Barcelona

Nov 2022 – present Supervision of a Ph.D. thesis, University of Barcelona

Nov 2022 – present Mentoring of a postdoctoral researcher

Feb. 2021 – Feb. 2022 Supervision of a master's thesis, Radboud University

Result: Peer-reviewed publication in Q1 journal. The student is currently pursuing his Ph.D.

Nov 2018 – Jul. 2020 Mentoring of an undergraduate student from Yale-NUS College in Singapore

Result: Peer-reviewed publication in Q1 journal.

May 2019 Lecturer for Astronomy Olympiad course, Radboud University

Jun 2018 Main organizer and lecturer of the ZTF Undergraduate Summer School, Caltech
Jun 2018 – Sep 2018 Supervision of an undergraduate research project within the SURF project at Caltech

2017 – 2018 President and dance instructor – Caltech Salsa Club, Caltech

Jul 2017 - Sep. 2017 Supervision of an undergraduate research project within the GROWTH programme, Caltech

Oct 2016 – Sep 2018 Mentoring a graduate student in a junior technical position, Caltech

2016, 2017 Teaching of Astronomy 101 (part), Caltech

2016 Teaching assistant for the iPTF summer school, Caltech

2013 Supervision of 10 students "Stellar structure and Evolution" course, University of Cambridge

2012 Co-supervision of a master's thesis, University of Barcelona

Complementary education

2021 Scientific writing, Efficient writing strategies, Writing a scientific review, and Grant writing and

presenting courses, Radboud University, The Netherlands.

2018 Storytelling for scientists, Caltech, USA

2017 35th Jerusalem Winter School in Theoretical Physics, Jerusalem, Israel

2013 GREAT Astrostatistics School 2013, Alicante, Spain

2012 GREAT-ITN on Fundamental Cosmic Distance Ladder and Transient Sky, Teramo, Italy

Reviewing activities

2015 – present Referee for the journals: Monthly Notices of the Royal Astronomical Society, Astrophysical

Journal, Publications of the Astronomical Society of the Pacific, and Astronomy and Astrophsyics

2022 Member of the European Southern Observatory time allocation committee

2021 Junior committee member of the Royal NL Astronomical Society, The Netherlands

2019 – 2021 Ph.D. evaluation board panel, Radboud University, The Netherlands

2018 External expert reviewer for telescope time allocation committee, Optical Infrared Coordination

Network for Astronomy (OPTICON), Horizon 2020

Membership of large and medium-size collaborations

2022 – present PI-level partner of the BlackGEM/MeerLICHT consortium. Leader of the "Stellar Mergers"

science group

2022 - present Full member of the Sociedad Española de Astronomía (SEA)

2022 – present Member of the Virgo / gravitational wave research group at University of Barcelona 2021 – present Member of the Vera C. Rubin Observatory Legacy Survey of Space and Time

(LSST) Transients and Variable (TVS) Stars Collaboration

2019 – present Member of the ENGRAVE collaboration for gravitational wave follow-up

2019 - present IAU junior member

2018 – present 2016 – 2018 Global Relay of Observatories Watching Transients Happen (GROWTH) Board member of the Postdoc Association Committee, Caltech, USA

2015 – present Intermediate Palomar Transient Factory (iPTF) and Zwicky Transient Facility collaboration (ZTF)

2012 – 2015 Public Spectroscopic Survey for Transient Objects (PESSTO)

2009 – 2016 Data Processing and Analysis Consortium (DPAC) for Gaia ESA mission

Organization of conferences, workshops, and seminars

Aug 2022 SOC – IAU general assembly symposium. "Machine learning in astronomy: possibilities and

pitfalls", Busan, South Korea

May 2022 SOC – Workshop on "Common Envelope challenges and future directions", Los Alamos, USA Jul. 2020 SOC – EAS Symposium "Common-envelope systems: progenitors, mergers and survivors"

2019 – 2020 Radboud University Astrophysics colloquium organizer

Jun. 2019 SOC – EAS Symposia on tidal disruption events and ZTF, Lyon, France Jun. 2018 SOC/LOC – "ZTF Undergraduate Institute", Caltech, Pasadena, USA SOC/LOC - "The Dynamic IR sky", workshop, Caltech, Pasadena, USA LOC - Pasadena Astronomy Postdoc Retreat, Lake Arrowhead, USA Organizer - Caltech seminar series organizer (Tea Talks), Caltech, USA LOC - GROWTH annual meeting, Pasadena, USA

Sep. 2015 LOC- Sharp Eyes on European Skies, Cambridge, USA Sep. 2014 SOC- 5th Gaia Science Alerts Workshop, Warsaw, Poland Jun. 2013 SOC - GREAT Astrostatistics School 2013, Alicante, Spain

Outreach activities

2022 Contribution to "Mothers in Astronomy" book (e-publication)

Speaker for Astronomy on tap, Leiden, NL
 Greenway lecture, Palomar Observatory, USA

2018 – 2021 Regular outreach activities at Radboud University, Nijmegen, NL

2017 Speaker for Astronomy on tap, Pasadena, USA

2012 – 2015 Support to local outreach events, Institute of Astronomy, Cambridge, UK

2014 Gaia Outreach event, Barcelona, Spain

2014 Gaia LIVE outreach talk in an elementary school, Cambridge, UK

2014 Open day in the Institute of Astronomy – Gaia outreach

2013 Stargazing live event at the Institute of Astronomy, Cambridge, UK

Software

nirc2red Photometric data reduction pipeline for the NIRC2 instrument on Keck (author).

rcred Photometric data reduction pipeline for the Rainbow Camera instrument, part of the SEDM (Spectral

Energy Distribution Machine), operating on the 60-inch telescope at Palomar (author).

GaiaPython
GSTEC
Software module to filter and visualize the environment of Gaia transient events (author).
Gaia Spectrophotometry Transient Event Classifier – Software for classification of transient and

variable objects using Gaia low-resolution spectroscopy (author).

IDT Initial Data Treatment. Software for the testing science requirements of the initial data reduction

module for Gaia data (contributor).

BBFit Python MCMC for fitting of different models of emission (black-body, power-law, disk...) to

photometric data.

Languages

Catalan, Spanish, Russian
English
Italian
French, Dutch

- Native speaker
- Advanced proficiency
- Fluent
- Basic