

Ekaterina ILIN

PhD student in astrophysics

date of birth

1992-09-11

contact

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github/ekaterinailin

languages

Russian, German
(bilingual)
English C1
French B2

skills

Python, Unix, LaTeX,
Git(Hub)

education

2018

→07/2022

PhD in Astrophysics

Leibniz Institute for Astrophysics Potsdam (AIP), Germany

Supervisor: Prof. Dr. Katja Poppenhäger

Stellar Flares in Star-Exoplanet Systems and Young Stars

I am interested in magnetic star-planet interactions, and their long-term effects on exoplanet habitability and stellar evolution.

2016 →2018

Master of Science in Astrophysics

University of Potsdam, Germany

Supervisor: Prof. Dr. Klaus Strassmeier

Mentor: Dr. Sarah J. Schmidt

Flares in Clusters using K2 Data

1,0 "with distinction"

This thesis quantified the relation between flaring activity on cool stars and their masses and ages for ZAMS to 600 Myr and K to mid-M dwarfs.

2012 →2016

Bachelor of Science in Physics

Karlsruhe Institute of Technology, Germany

Specialization in Biophysics

Supervisor: Prof. Dr. Ulrich Nienhaus

Uptake of TAT-coated Gold Nanoclusters in Live HeLa-Cells

1,4 "very good"

refereed publications

Giant white-light flares on fully convective stars occur at high latitudes

Ilin, Ekaterina; Poppenhäger, Katja; Schmidt, Sarah J.; Järvinen, Silva P.; Newton, Elisabeth R.; Alvarado-Gómez, Julian D; Pineda, Sebastian J.; Davenport, James R. A.; Oshagh, Mahmoudreza; Ilyin, Ilya

2021, Monthly Notices of the Royal Astronomical Society, XXXXXXXX

DOI arXiv:XXXX.XXXXX

AltaiPony – Flare science in Kepler, K2 and TESS light curves

Ilin, Ekaterina

2021, Journal of Open Source Software, 6(62), 2845

10.21105/joss.02845

Flares in Open Clusters with K2. II. Pleiades, Hyades, Praesepe, Ruprecht 147, and M67

Ilin, Ekaterina; Schmidt, Sarah J.; Poppenhäger, Katja; Davenport, James R. A.; Kristiansen, Martti H.; Omohundro, Mark

2021, Astronomy & Astrophysics, 645,i d.A42, 25 pp.

doi:10.1051/0004-6361/202039198 arXiv:2010.05576

Flares in Open Clusters with K2. I. M45 (Pleiades), M44 (Praesepe) and M67

Ilin, Ekaterina; Schmidt, Sarah J.; Davenport, James R. A.; Strassmeier, Klaus G.

2019, Astronomy & Astrophysics, 622, A133/16.

doi:10.1051/0004-6361/201834400 arXiv:1812.06725

telescope time

2020

SALT HRS, 2.8 hours DDT

PI: Katja Poppenhäger, Co-Is: Ekaterina Ilin, Sarah J. Schmidt

work and teaching

2020	University of Potsdam <i>Teaching assistant for undergraduates.</i>	Potsdam, Germany
2018	Leibniz Institute for Astrophysics (AIP) <i>Research Assistant</i>	Potsdam, Germany
2016 → 2018	University of Potsdam <i>Teaching assistant for undergraduates.</i>	Potsdam, Germany

academic presentations and posters

2021	Contributed talk	European Astronomical Society Meeting 2021 virtual
	The coolest stars may not hit their planets with their flaring all that much	
2021	Contributed talk	XMM-Newton Science Workshop: A high-energy view of exoplanets and their environments virtual
	Giant white-light flares on fully convective stars occur at high latitudes	
2021	Virtual Poster	Cambridge Workshops of Cool Stars, Stellar Systems and the Sun CoolStars 20.5 virtual, global
	Giant white-light flares on fully convective stars occur at high latitudes	
2020	Contributed talk	Annual Meeting of the German Astronomical Society virtual, Germany
	Flares, mass, age, AND rotation. Calibrating the flaring-age-mass relation in open clusters.	
2019	Contributed talk	16th Potsdam Thinkshop: The rotation periods of cool stars: Measurements, uses, connections and prospects Potsdam, Germany
	At a gallop: stellar flares from Kepler/K2 and TESS	
2019	Contributed talk	Planet-Star Connections in the Era of TESS and Gaia Santa Barbara, CA, USA
	Stellar magnetic evolution: flaring activity in K2 open clusters	
2019	Seminar talk	Centre for Star and Planet Formation (STARPLAN) Copenhagen, Denmark
	Stellar magnetic evolution: superflares	
2018	Conference poster	CoolStars20 Boston, MA, USA
	Exploring flaring activity as an age indicator using open cluster data	
2018	Contributed talk	Dwarf Stars and Clusters with K2 Boston, MA, USA
	In search of the flaring-age relation.	

awards and scholarships

2021 →ongoing	Fulbright Scholarship for Doctoral Students Commission Includes a stipend, travel grant, and academic support throughout a 6-month research stay in the USA.	The German-American Fulbright
2020 →ongoing	Doctoral Scholarship Includes a stipend, travel grants, and academic support throughout the doctoral studies.	German Academic Scholarship Foundation
2019	Graduation Award Award for excellent master theses in physics earned at universities in Berlin and Potsdam.	Physikalische Gesellschaft zu Berlin, Berlin, Germany
2018	Visiting Scientist Awarded funding for a research visit at the Kepler mission headquarters.	NASA Ames Research Center, Mountain View, CA, USA
2014	Erasmus+ Scholarship Awarded funding for six month of undergraduate studies. Focus: Space Physics, Computational Physics	Universitet i Oslo, Norway
2012 →2018	Full Scholarship Includes a stipend, travel grants, and academic support throughout the undergraduate and graduate studies.	German Academic Scholarship Foundation

outreach and civic involvement

2021	Public talk on YouTube 30-min YouTube video about electromagnetic star-planet interactions on the popular German astronomy channel "Sterne, Weltall und das Leben", > 20k views.	Sterne, Weltall und das Leben
2019 →2021	Effective Altruism Co-founder and current chair of the board at the German Effective Altruism Network (NEAD e. V.). Coordinating the German-speaking Effective Altruist community: Community building, strategy, volunteer management.	Netzwerk für Effektiven Altruismus Deutschland e. V.
2013 →2019	Junior scientists network Organising interdisciplinary workshops and symposia for students and young researchers in STEM, presenting at science fairs, publishing articles in the club magazine; member of the executive board.	Deutsches Jungforschernetzwerk - juFORUM e.V.