JUNAIS

Curriculum Vitae

March 2024

Personal Details

First Name:	Junais
Last Name:	Junais[1]
Date of Birth:	27/04/1995
Nationality:	Indian
Professional Address:	ul. Ludwika Pasteura 7, 02-093 Warsaw, POLAND
Phone:	+48 - 571033083
E-mail:	junais@ncbj.gov.pl (work), junais2009@gmail.com (personal)
Website:	https://junais-astro.github.io/

Professional Experience

DEC 2021 - PRESENT	Post-doctoral researcher (Assistant Professor)
Institute	Astrophysics division (BP4) of the National Center for Nuclear Research (NCBJ), Warsaw, Poland
Main activities	Constraining dust attenuation in low surface brightness galaxies using multi-wavelength photometric data and spectral energy distribution fitting techniques
Supervisor	Katarzyna MALEK

Education

October 2018 - September 2021	Ph.D. in Astrophysics and Cosmology **Laboratoire d'Astrophysique de Marseille (LAM)**, FRANCE Supervisor: Samuel BOISSIER
September 2016 - June 2018	Masters in Astrophysics **Aix Marseille University**, FRANCE
June 2013 - June 2016	Bachelors in Physics (with Honours) **University of Delhi, Hindu College**, INDIA

Publication metrics

The following metrics are based on the NASA ADS database.

	Total publications		Refereed publications	
	All papers	**First author papers**	**All papers**	**First author papers**
Number of papers	21	6	16	5
Total citations	95	41	92	40
Self-citations	22	7	22	7
Refereed citations	68	37	66	36
h-index	7	4	7	4

[1] As per my official documents (e.g., passport) I only have a single name 'Junais', without a last name. It is not unusual for Indian nationalities. When it is mandatory for administrative purposes to provide a last name, I generally use the first name twice.

Invited Talks

1. *Dust Properties of Low Surface Brightness Galaxies and Their Implications to Future Large Sky Surveys*
   Café-Club, LAM (Marseille), January 2024
2. *Estimation of galaxy physical properties using SED fitting techniques in the LSST era*
   LSST@Europe5 conference, Pore (Croatia), September 2023
3. *Predictions on the gas content of ultra-diffuse galaxies in the Virgo cluster*
   Low surface brightness galaxies in the SKA era meeting, Paris (France), December 2022

Contributed Talks

1. *Shedding Light on Low Surface Brightness Galaxies with the Power of Machine Learning*
   Galaxy Evolution Circle, LAM (Marseille), January 2024
2. *Exploring the dust content of Low Surface Brightness Galaxies with multi-wavelength observations*
   Rubin Galaxies Collaboration Meeting, Paris (France), June 2023
3. *Strong evidence of ram-pressure stripping in low surface brightness galaxies of the Virgo cluster*
   HERA workshop, Garching (Germany), March 2023
4. *Transformation of gas-rich ultra-diffuse galaxies into quiescent ones due to ram-pressure stripping in the Virgo cluster*
   2nd Roman Juszkiewicz Symposium, Warsaw (Poland), September 2022
5. *Strong evidence for ram-pressure stripping in diffuse and ultra-diffuse galaxies in the Virgo cluster*
   Journées scientifiques "Galaxies" du PNCG, Strasbourg (France), June 2022
6. *On the role of environment in the evolution of low surface brightness galaxies in the Virgo cluster*
   European Astronomical Society Annual Meeting, Symposium S12, online talk, July 2021
7. *Studying giant low surface brightness galaxies like Malin 1 with current and future spectroscopic facilitie*
   Indo-French CEFIPRA astronomy meeting (IFCAM), online talk, March 2021

Seminars

1. *Star formation and its history in Low Surface Brightness Galaxies*
   National Center for Nuclear Research (NCBJ), Warsaw (Poland), December 2021
2. *Diffuse galaxies: From low mass Ultra Diffuse Galaxies to the giant Malin 1*
   Stony Brook University, New York (USA), November 2019

Fellowships and grants

1. Obtained a *Seal of Excellence* for the Marie Sklodowska-Curie Actions (MSCA) European Postdoctoral Fellowships application with an overall score of 91% (February 2024)
2. Co-I of the PHC Polonium travel grant by the Polish Ministry (NAWA) for Poland France collaboration in the study of low surface brightness galaxies (PI: Katarzyna Malek; 5600 euros; 2022-2024)
3. Co-I of a grant by LAM (France) to buy an Hα narrow-band filter at the redshift of Malin 1 (4000 euros; 2021)
4. Ecole Doctoral (ED352) Ph.D. fellowship by Aix Marseille University, France (61200 euros; 2018-2021)
5. AMIDEX fellowship for Master studies by Aix Marseille University, France (16000 euros; 2016-2018)
6. INSPIRE Scholarship for Bachelor studies by the Department of Science & Technology, India (660 euros; 2013-2016)

Successful telescope proposals

1. PI of a proposal for the observation of two giant low surface brightness galaxies using the Astrosat Ultraviolet Imaging Telescope (UVIT)
2. Co-I of a proposal for the Legacy survey of the Virgo cluster using UVIT (PI: Alessandro Boselli)
3. Co-I of a VLT/MUSE proposal for the IFU observation of the galaxy Malin 1 (PI: Gaspar Galaz)
4. Co-I of an ALMA cycle 10 proposal for the observation of molecular gas in Malin 1 (PI: Gaspar Galaz)
5. Co-I of a JWST cycle 3 proposal for the mid-infrared observation of Malin 1 (PI: Michelle Berg)

Supervision

Co-supervisor of three Ph.D. students at the National Center for Nuclear Research (NCBJ), Warsaw, Poland. Two of them already graduated in September 2023 (one with a distinction) and the third student is currently in the final year of Ph.D.

Refereeing activity

- Referee for Gemini Observatory GMOS spectrograph observation proposals
- Referee for MNRAS journal
- Thesis committee member of two Ph.D. defenses at NCBJ

Active Collaborations

- LSST Galaxies Science Collaboration (LSST GSC), with early data access rights
- The Virgo Environmental Survey Tracing Ionised Gas Emission (VESTIGE) - PI: Alessandro Boselli (LAM, France)
- Samuel Boissier (LAM, France)
- Philippe Amram (LAM, France)
- Benoit Epinat (LAM, France)
- Jin Koda (Stony Brook University, USA)
- Enrique Gaztanaga (University of Portsmouth, UK)
- Gaspar Galaz (PUC, Chile)

Languages

Professional working proficiency :	English
Native or bilingual proficiency :	Malayalam
Elementary proficiency :	French, Hindi, Tamil

Scientific and technical skills

- Advanced knowledge of galaxy formation and evolution, in particular, low surface brightness galaxies
- Expertise in UV, optical, and IR photometric and spectroscopic data
- Skilled with machine learning techniques to analyze data from large-sky surveys
- Programming language skills: Python, Fortran, Mathematica
- Software skills: IRAF, DS9, Topcat, Aladin, LATEX
- Familiar operating systems: Linux, Mac, Windows