JUNAIS

Curriculum Vitae
January 2024

PERSONAL INFORMATION

First name: JUNAIS[1]

Last name: JUNAIS

Date of birth: 27/04/1995

Nationality: Indian

Professional Address: ul. Ludwika Pasteura 7, 02-093 Warsaw, POLAND

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PROFESSIONAL EXPERIENCE

Position	Post-doctoral researcher (Assistant Professor)
Period	01/12/2021 to 24/04/2024
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 Małek

EDUCATION

Degree	Ph.D. in Astrophysics and Cosmology
Period	01/10/2018 to 22/09/2021
Date of defense	22/09/2021
Institute	Laboratoire d'Astrophysique de Marseille (LAM), France
Title of thesis	Star formation and its history in low surface brightness galaxies
Main activities	Study of kinematics and the role of environment in the evolution of low surface brightness galaxies using spectroscopic and photometric data.
Supervisor:	Samuel Boissier

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.

Degree	Masters in Astrophysics
Period	01/10/2016 to 30/09/2018
Institute	Aix Marseille University, Marseille, France
Master thesis	First spectroscopic study of ionized gas emission lines in the extreme Malin 1 galaxy

Degree	Bachelors in Physics (with Honours)
Period	01/06/2013 to 30/06/2016
Institute	University of Delhi, Hindu College, New Delhi, India

PUBLICATION METRICS

The following metrics are based on the NASA ADS database		**Totals**	**Refereed**
All papers	Number of papers	20	14
	Total citations	85	82
	Number of self-citations	19	19
	Refereed citations	62	60
	h-index	7	7
First author papers	Number of papers	6	5
	Total citations	40	39
	Number of self-citations	7	7
	Refereed citations	33	32
	h-index	4	4

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, Poreč (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 facilities"*
   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. 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 Małek*; 5600 euros; 2022-2024)*
2. Co-I of a grant by LAM (France) to buy an Hα narrow-band filter at the redshift of Malin 1 *(4000 euros; 2021)*.
3. Ecole Doctoral (ED352) Ph.D. fellowship by Aix Marseille University, France *(61200 euros; 2018-2021)*
4. AMIDEX fellowship for Master studies by Aix Marseille University, France *(16000 euros; 2016-2018)*
5. 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 proposal for the observation of molecular gas in Malin 1 (PI: Gaspar Galaz)

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 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

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)
- Katarzyna Małek (NCBJ, Poland)
- 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
- Advanced knowledge of 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