JUNAIS

Curriculum Vitae

May 2025

Personal Details

First Name:	Junais
Last Name:	Junais [1]
Date of Birth:	27/04/1995
Nationality:	Indian
Professional Address:	C/ Vía Láctea, s/n E-38205 La Laguna - Tenerife, Spain
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Expertise

- Application of machine learning tools on deep images from large-sky surveys
- Kinematics and deep imaging of low surface brightness galaxies
- UV, optical, and IR photometry and longslit/IFU spectroscopic data analysis
- Spectral energy distribution modeling

Professional Experience

NOV 2024 - PRESENT	Post-doctoral researcher
Institute	Instituto de Astrofísica de Canarias (IAC), Tenerife, Spain
Project	Investigating low surface brightness and dwarf galaxies from the Euclid survey

DEC 2021 - AUG 2024	Post-doctoral researcher
Institute	Astrophysics division (BP4) of the National Center for Nuclear Research (NCBJ), Warsaw, Poland
Project	Constraining dust attenuation in low surface brightness galaxies using SED modeling and IFU observations

Education

October 2018 - September 2021	Ph.D. in Astrophysics and Cosmology **Laboratoire d'Astrophysique de Marseille (LAM)**, FRANCE
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

[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.

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	38	8	24	5
Total citations	207	68	201	67
Self-citations	41	7	41	7
Refereed citations	169	62	165	61
h-index	9	5	9	5

Invited Talks

1. *Dust Properties of Low Surface Brightness Galaxies and Their Implications to Future Large Sky Surveys*
   Café-Club, LAM, Marseille (France), January 2024
2. *Estimation of galaxy physical properties using SED fitting techniques in the LSST era*
   LSST@Europe5 conference, Porec (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. *Unusual metallicity gradient and star formation efficiency in the giant low surface brightness galaxy Malin 1*
   LSST@Europe6 conference, La Palma (Spain), September 2024
2. *A new insight on the dust properties of low surface brightness galaxies*
   IAU General Assembly 2024, Division H, online talk, August 2024
3. *Unusual metallicity gradient and star formation efficiency in the giant low surface brightness galaxy Malin 1*
   IAU General Assembly 2024, Division J, online talk, August 2024
4. *Shedding Light on Low Surface Brightness Galaxies with the Power of Machine Learning*
   Galaxy Evolution Circle, LAM, Marseille (France), January 2024
5. *Exploring the dust content of Low Surface Brightness Galaxies with multi-wavelength observations*
   Rubin Galaxies Collaboration Meeting, Paris (France), June 2023
6. *Strong evidence of ram-pressure stripping in low surface brightness galaxies of the Virgo cluster*
   HERA workshop, Garching (Germany), March 2023
7. *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
8. *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
9. *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
10. *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. *Automatic identification of low surface brightness galaxies from large sky surveys using deep-learning*
   AstroCoffee talk, Observatoire Astronomique de Strasbourg (France), April 2025
2. *Low surface brightness galaxies in the era of deep large-sky surveys*
   Special Colloquium, National Center for Nuclear Research (NCBJ), Warsaw (Poland), June 2024

3. *Star formation and its history in Low Surface Brightness Galaxies*
   National Center for Nuclear Research (NCBJ), Warsaw (Poland), December 2021
4. *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. LSST-DA Science Catalyst funding for LSST@Europe7 conference organizing committe (PI: Junais, 7500 USD, September 2025)
2. Offered a 2-year NAWA Bekker grant from the Polish National Agency (January 2025; 76 000 euros; declined the offer)
3. Recipient of the NCBJ departmental award for outstanding scientific achievements in the year 2023 on the study of low surface brightness galaxies (June 2024)
4. Obtained a *Seal of Excellence* (with an overall score of 91%) for the Marie-Curie European Postdoctoral Fellowship application for the study of UDGs (February 2024)
5. 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; 5 600 euros; 2022-2024)
6. Co-I of a grant by LAM (France) to buy an Hα narrow-band filter at the redshift of Malin 1 (4 000 euros; 2021)
7. Ecole Doctoral (ED352) Ph.D. fellowship by Aix Marseille University, France (61 200 euros; 2018-2021)
8. AMIDEX fellowship for Master studies by Aix Marseille University, France (16 000 euros; 2016-2018)
9. 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-PI for the spectroscopic observation of ultra-diffuse galaxies using LBT/MODS (PI: Peter Weilbacher)
3. Co-PI for the distance confirmation of ultra-diffuse galaxy candidates using long-slit observations of OHP/MISTRAL (PI: Samuel Boissier)
4. Co-I of a proposal for the Legacy survey of the Virgo cluster using UVIT (PI: Alessandro Boselli)
5. Co-I of a VLT/MUSE proposal for the IFU observation of the galaxy Malin 1 (PI: Gaspar Galaz)
6. Co-I of an ALMA cycle 10 proposal for the observation of molecular gas in Malin 1 (PI: Gaspar Galaz)
7. Co-I of a JWST cycle 3 proposal for the mid-infrared observation of Malin 1 (PI: Michelle Berg)

Organising Commitees

- Local organizing committee (LOC) member of upcoming LSST@Europe7 conference (Poznan, September 2025)
- Exgal-Twin project Annual Meeting LOC and SOC member (Tenerife, January 2025)
- Exgal-Twin project regional workshop LOC (Tenerife, April 2025)

Supervision

Co-supervisor of three Ph.D. students at the National Center for Nuclear Research (NCBJ), Warsaw, Poland. All of them graduated by the end of 2024.

Refereeing activity

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

Collaborations

- Member of the Euclid Consortium Local Universe and Galaxy Evolution working groups
- LSST Galaxies Science Collaboration (LSST GSC) member
- The Virgo Environmental Survey Tracing Ionised Gas Emission (VESTIGE) - PI: Alessandro Boselli (LAM, France)
- Member of the EU Horizon Europe Widening Actions grant on *'Excellence in Galaxies - Twinning the IAC'* - PI: Johan Knapen (IAC, Spain)

Languages

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