

Curriculum Vitae of Rupak Roy

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Date of Birth : March 04, 1980

Birthplace : Durgapur (state – West Bengal), India

Nationality : Indian

Sex , Marital status : Male, Married

h-index : 21 (*Scopus*); **Total Citation :** 2000 (*Scopus*); **Orcid ID :** 0000-0002-9711-6207

Google Scholar : <https://scholar.google.com/citations?user=E24CoUwAAAAJ&hl=en>

Scientific Interest

- Observational and Theoretical aspects of high energetic cosmic explosions – Core-collapse Supernovae, Superluminous Supernovae and Tidal Disruption Events.
 - Observational aspects of extremely energetic outflows from AGNs, Radio Galaxies etc.
 - Interested in astronomical instrumentation in the existing / upcoming optical telescopes.
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Key Learning

- Optical photometric and spectroscopic monitoring of transient and analysis of data taken from 1-m to 10-m class optical telescopes like CRTS, ST, CT, IGO, LCO, NOT, NTT, TNG, BTA, VLT, GEMINI, GTC and SALT.
 - Infrared photometric data reduction of REM and UKIRT telescopes.
 - Analysis of UV data. Used *Swift*/UVOT and ASTROSAT/UVIT data. Made pipeline.
 - Work with big-data sets from Surveys like 'Palomar Transient Factory (PTF)', 'Catelina Real-Time Transient Survey (CRTS)'.
 - Radio data analysis of VLBA, VLA and GMRT / uGMRT.
 - Use of hydrodynamical codes : MESA, SNEC, TARDIS, MosFit, SYN++.
 - Comfortable astronomical softwares like IRAF, DAOPHOT, AIPS and other programming Languages like Python, C and IDL. Developing "pipelines" for automated data reduction.
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Academic qualification & working experience

- **February 2023 to till date** - Assistant Professor at Manipal Centre for Natural Sciences (MCNS), Manipal Academy of Higher Education (MAHE), Manipal, India
- **February 2022 to February 2023** - Postdoctoral fellow at Manipal Centre for Natural Sciences (MCNS), Manipal Academy of Higher Education (MAHE), Manipal, India

- **August 2017 to November 2020** - Postdoctoral fellow at IUCAA, Pune, India
 - **May 2014 to May 2017** - Postdoctoral fellow at Department of Astronomy, The Oskar Klein Center, Stockholm University, Sweden.
 - **November 2013 to April 2014** - Postdoctoral fellow at University of Liege, Liege, Belgium. Funded by BELSPO (co-funded by the Marie Curie Actions of the European commission), Belgium.
 - **February 2013 to October 2013** - Postdoctoral fellow at ARIES, Nainital, India.
 - **September, 2013** – PhD in Physics from Kumaun University (KU), Nainital, India. *The Thesis work was done at ARIES, Nainital and was submitted in KU on December 2012.*
Thesis title : Investigation of Energetic Cosmic Explosions and their after-effects.
Thesis Supervisor : Dr. Brijesh Kumar, Scientist – E , ARIES , Nainital.
 - **2005** : M. Sc. in Physics. University of Delhi, India.
 - **2002** : B. Sc. with Physics (Honours), Mathematics, Electronics. University of Calcutta, India.
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Awards and Fellowships and other professional recognitions

Grant Applied as a Principal-Investigator (awaiting for results) :

- Astronomical transients: Early classification and multi-wavelength follow-up
 Granting Agency: ISRO, Gov. of India; Date: 29/01/2024; Amount: INR 2264280/-

Grant Received as a Principal-Investigator :

- **ORP Travel Grant** : Travel grant under Opticon-Radionet Program (ORP) from the University of Cambridge to attend the 14th Gaia Science Alerts Workshop in 2023.
- **IAU Travel Grant** : To participate the 30th General Assembly of International Astronomical Union (IAU). Grant Amount 1100 EURO
- **Alva and Lennart Dahlmark research grants**: For short term research from Stockholm University, Sweden in the year 2016. Grant Amount 10,500 SEK
- **COSPAR Fellowship** : Awarded with COSPAR fellowship in the year 2009.

Professional recognitions :

- **IUCAA Associateship** : I have been recognized as IUCAA associate in the year 2023 under "Visiting Associateship Programme" at IUCAA Pune.
- **IAU - Junior member**: I have been selected as a Junior member of International Astronomical Union in the year 2019 (<https://www.iau.org/administration/membership/individual/19062/>)
- **ASI - member** : I am life-time member of Astronomical Society of India (No.- L2255)
- **ENGRAVE** : I am a member of ENGRAVE collaboration (PI - Andrew Levan, Univ. of Warwick). Under this project the EM counterparts of GW sources are followed at VLT.
- **PESSTO/ePESSTO/ePESSTO+** : I am a member of the PESSTO project (PI - Stephan

Smartt, Univ. of Belfast) which is a large project of European Southern Observatory (ESO).

- **GSP (SNEx)** : I am a member of the Global Supernova Project (GSP, SNEx) collaboration (PI - Andy Howell, Las Cumbres Observatory).
 - **GAIA Science Alert** : I am a member of the GAIA Science Alert Team (PI - Lukasz Wyrzykowski, University of Warsaw).
 - **JEST 2006** : Qualified the Joint Entrance Screening Test for PhD programs in Physics at Indian research institutes. 'JEST Rank' is 185 with a 'Percentile score' 94.33.
 - **Report in other journals / Press release** :
 - (i) 'Supernova up close' - an article on the event SN 2008in. This was reported in the *NATURE INDIA* Journal in the year 2011.
Link: <http://www.natureasia.com/en/nindia/article/10.1038/nindia.2011.114>
 - (ii) Press release (16th October, 2017) at IUCAA on the detection of Gravitational Wave and its Electromagnetic counterpart and involvement of Indian Scientists.
Link: <https://timesofindia.indiatimes.com/city/pune/iucaa-scientists-contributed-most-to-countrys-share/articleshow/61113531.cms>
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Departmental Responsibilities

- I have been approved as a PhD Supervisor of Manipal Academy of Higher Education (MAHE) in the year 2023.
 - I am a member of the Student Advisory Committee of Manipal Centre for Natural Sciences (MCNS), MAHE.
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Teaching Experience

In the last three year I got involved in (i) teaching and delivered lectures for MSc courses at the University (MCNS, MAHE). The subjects, that have been taught are - (1) *Radiative processes in Astrophysics*; and (2) *Research Methodology & Statistics*. (ii) Lab-experiments/computation - (1) *Optical photometry*, (2) *Solution of Schrodinger Equation*

Research Guidance

- Mr. Dinesh Hebbar is pursuing his **PhD** under my supervision. He took admission Under T.M.A. Pai fellowship (2023-Batch 2). His Thesis will be submitted by 2028.
- Miss Chaitrika B. M. is pursuing her MSc Thesis project under my supervision. She is a second year MSc student at MCNS pursuing the Integrated MSc-PhD program. Her Thesis will be submitted by June, 2025.
- I supervised Megha Madhushudhan from MCNS, MAHE for her MSc. Thesis in the year 2023.

https://drive.google.com/file/d/1XaPE9PVfUnEc5zDqKZGUct_poAqX1XsO/view?usp=sharing

- I co-supervised Mr. Kiran Jayasurya from IIST, Thiruvananthapuram for his MSc. Thesis to do spectroscopic modeling of Tidal Disruption Events. Thesis Supervisor is Dr. Samir Mandal from IIST, Thiruvananthapuram.

<https://drive.google.com/file/d/1TeIu2C7tMKcpGwSB5e-5LZ7538kctg1n/view?usp=sharing>

- I co-supervised Ms. Akriti Singh from IIST, Thiruvananthapuram during her MSc. Thesis. The title of the thesis is "Understanding the Nuclear-transient". Thesis Supervisor is Dr. Samir Mandal from IIST, Thiruvananthapuram.

<https://drive.google.com/open?id=1jYccOLGG7lxNRMmTMy7XDFKxNPutXM42>

- I supervised BSc student Kaustav Chatterjee from IISER, Mohali during his short visit (May 07 - 31, 2019) to IUCAA and worked on the project related to Superluminous Supernovae.
- I supervised the MSc. student Haqnawaz Rafiq from Kashmir University during Vacation Student Program at IUCAA between May 15 - June 30, 2019.
- I supervised the MSc. student Prathamesh Dash from NIT, Rourkela during Vacation Student Program at IUCAA between May 15 - June 30, 2018.
- I supervised MSc student Swapnil Singh from IIST, Thiruvananthapuram during her short visit (Dec 19 - 30, 2017) to IUCAA and worked on the project related to Nuclear-transients.

Reviewer of Telescope Time allocation

- I regularly review proposals on time-domain astronomy submitted at uGMRT and 3.6m DOT.

Conducting Workshops and Meetings

- Proposer and principal organizer of the workshop "Planning a more robust followup of transient astronomical sources from India" at the meeting of Astronomical Society of India (ASI), 2024.

(<https://astron-soc.in/asi2024/ws5>).

- Organizer of the National Science Day 2023 celebrated at MCNS, MAHE on 28 February 2023.
 - Member of the Local Organizing Committee of the 3-day Aditya-L1 Support Cell Workshop organized at MAHE between 28-30 November 2022 (<https://al1ssc.aries.res.in/workshop-2>)
 - Member of the Local Organizing Committee of the 3-day national workshop on "Beginning Astronomy: Start a data-driven journey", organized at MAHE during 02-04 February 2023.
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Important Projects / Proposals / Accepted Telescope Time

Accepted Telescope Time

- **VLBA regular time (2025): Principal-Investigator (Single PI)** of the Very Long Baseline Array (VLBA) in the upcoming cycle 25A to observe the structure of the radio counterpart of a nuclear transient. Awarded **15 hours regular time**.
- **JVLA proposal (2024 - 2025):** Principal-Investigator of the Very Large Array (JVLA) in the ongoing cycle 24B and upcoming cycle 25A to observe the radio counterpart of tidal disruption event iPTF15dof. Awarded 3 hours ToO time.
- **HCT and VBT proposals (2024):** Awarded **12 hours ToO time** in the Himalayan Chandra Telescope (HCT), and **12 hours ToO time** in the Vainu Bappu Telescope (VBT) to do spectroscopy of Type – IIIn and Superluminous supernovae. My PhD student **Dinesh Hebbar (MCNS, MAHE)** was the PI with myself as a co-PI.
- **Swift ToO proposals (2018-2023):** Principal-Investigator (Single PI) of many Target of Opportunity (ToO) proposals to observe transients in UV and X-ray bands using *Swift satellite*. I regularly do these observations as a member of PESSTO and GSP collaborations.
- **JVLA proposal (2020-2021):** Principal Investigator of the JVLA proposal (VLA/20B-427, VLA/21A-420) to observe the radio luminous TDE.
- **uGMRT regular proposal (2019-2022) :** Principal Investigator of the uGMRT regular proposals to study the radio luminous TDEs (e.g., AT2019azh). Proposal-IDs - 37_107, 38_084, 39_108, 40_095.
- **10m SALT proposal (2019-2020) :** Principal Investigator of the proposals "Spectroscopic study of the hosts of Tidal Disruption Events" in 10m SALT. Proposal-IDs - 2019-1-SCI-033, 2019-2-SCI-036. This is a part of our long-term program using SALT.
- **10m SALT proposal (2019-2020) :** Principal Investigator of the proposals to explore the hosts' properties of SLSNe using 10m SALT. Proposal-IDs - 2019-1-SCI-029, 2019-2-SCI-029. This is a part of our long-term program using SALT.
- **10m SALT Large Science proposal (2018-2020) :** Co-Investigator of the on-going proposal "Observing the Transient Universe" in 10m SALT. Project Investigator is Prof. David Buckley, South African Astronomical Observatory. Proposal-ID - 2018-1-LSP-001.
- **2m HCT proposal (2019-2020) :** Principal Investigator of the long term HCT proposal to study the host galaxies of TDEs (Proposal-ID : 2019 cycle-2, cycle-3; 2020 cycle-2).
- **uGMRT DDT proposals (2019-2020) :** Principal Investigator of the uGMRT DDT proposals to study the radio luminous TDE AT2019azh, 2019dsg in Band-3, Band-4 and Band-5 (Proposal

ID - DDTC118, DDTC113, DDTC084).

- **uGMRT proposal (2018-2019)** : Co-Investigator of various uGMRT proposals to follow the fast rising optical transient AT2018cow. Proposal-IDs are 35_067, 36_041, and 37_085.
- **10m SALT proposal (2018-2019)** : Principal Investigator of the proposal "Study of the hosts' properties of three extremely luminous core-collapse Supernovae" in 10m SALT. This is a part of our long-term program using SALT. Proposal-ID - 2018-2-SCI-038.
- **ASTROSAT ToO / Regular proposals** : I observe the transients in UV using ASTROSAT (& Swift) satellite. Few ASTROSAT proposals are : A05_194, A07_091, T02_046, T03_090.
- **ePESSTO/ePESSTO+ proposals** : Co-Investigator of the on-going proposal in European Southern Observatory for rapid spectroscopic follow-up of the transients. Principal-Investigator is Prof. Stephen J. Smartt, Queen's University, Belfast (Proposal-ID: 199.D-0143, 1103.D-0328).
- **8m VLT proposal (2017-2020)** : Co-Investigator of ePESSTO+, ENGRAVE projects, and hence involved in various sub-projects to observe transients from 8m VLT (e.g., Proposal-ID: 0104.B-0709, 2104.D-5006, 0105.D-0070).
- **ENGRAVE project** : Co-Investigator of the on-going ESO ENGRAVE project. Principal-Investigator - Prof. Andrew Levan, University of Warwick (VLT cycles-P102, P103, P104, P105).
- **LOFAR Cycle 5** : Co-Investigator of the proposal (code: LC5_016; PI : Sumana Nandi, OKC, Sweden) entitled "A low frequency study of a new sample of double-double radio galaxies". Time awarded: 8 hours.
- **GMRT Cycle 28** : Co-Investigator of the proposal (code: 28_044; PI : Sumana Nandi, OKC, Sweden) entitled "A low-frequency observations of a misaligned DDRG".
- **GMRT Cycle 26** : Co-Investigator of the proposal (code: 26_030; PI : Sumana Nandi, OKC, Sweden) entitled "A multifrequency study of a new sample of double-double radio galaxies (DDRGs)".
- **IGO Cycle 2014B** : Principal-Investigator of approved TOO-proposal titled "Target-of-Opportunity observations of the supernovae detected from the intermediate Palomar Transient Factory survey" in 2-m IGO Cycle 2014B.
- **EVLA / CHANDRA proposal** : Co-Investigator of the accepted Joint EVLA / CHANDRA proposal (Number : 13500809; PI : Alak Ray, TIFR, India) for the cycle-13 for simultaneous Radio and X-ray observation of nearby core-collapse Supernovae.
- **IGO Cycle 2011A** : Principal-Investigator of approved TOO-proposal titled "Spectroscopic follow-up of Type II core-collapse supernovae" in 2-m IGO Cycle 2011A.
- **BTA Cycle 2011, I (Jan – June)** : Co-Investigator of approved proposal titled "Spectral and photometric monitoring of distant supernovae" in 6-m BTA Cycle 2011, I (Jan – June).
- **IGO Cycle 2009A** : Principal-Investigator of approved proposal titled "Spectroscopic study of

core-collapse supernovae” in 2-m IGO Cycle 2009A.

- **BTA Cycle 2009, II (July – Dec)** : Co-Investigator of approved proposal titled “Spectral and photometric observations of core collapse supernovae” in 6-m BTA Cycle 2009, II (July – Dec).
- **ST Observing Proposals (2007 – 2011)** : During my Ph.D., every year photometric observations of transients at ARIES have been pursued through 1-m Sampurnanand Telescope (ST) in three cycles. I was the principal investigator for various observing proposals (TOO and regular) accepted between 2007 and 2011 for observations of transient events. The important transients which were monitored by me during PhD period are : SN 2008D, SN 2008gz, SN 2008in, SN 2009jf, CSS 100217, SN 2010hq, SN 2010jl, SN 2010kd, SN 2011dh, GRB071010A, GRB080430 and GRB090424.

Involvement in Government-funded projects

- **DST-RFBR Project (2011)** : Co-Investigator of the project entitled “*Spectroscopic and photometric monitoring of GRB afterglows, core-collapse supernovae and their host galaxies*”. Project duration : 2011 – 2013. Funding Agency : Department of Science and Technology (DST), Government of India under international cooperation with Russia (Project code : INT/RFBR/P-100; PI : S. B. Pandey, ARIES, India).
- **DST-RFBR Project (2008)** : Actively participated in the joint Indo-Russian project “*Spectroscopic and photometric studies of Type Ib/c SNe in the context of GRB-SN correlation*”. Project duration: 2008 – 2010. Funding Agency: Department of Science and Technology (DST), Government of India under international cooperation with Russia (Project code : INT/RFBR/P-25; PI : S. B. Pandey, ARIES, India).

Schools / Conferences / Other Visits

Previous conferences and visits

- **2024, 30 Sep - 02 Oct** : Invited talk on "An automated tool to find the UV transients and its inclusion in BHTOM system" at *15th Gaia Science Alerts Workshop and ORP Time-Domain meeting in Heraklion, Crete, Greece (I participated on-line)*.
- **2024, 31 Jan - 04 Feb** : Organized workshop on "Planning a more robust followup of transient astronomical sources from India" at the meeting of Astronomical Society of India (ASI), 2024. Also presented a poster on the host galaxies of Tidal Disruption Events.
- **2023, 30 Oct - 03 Nov** : Invited talk on 'Explosive nucleosynthesis and beyond: Energy generation in supernovae from massive progenitors' in the international meeting 'International Symposium on Nuclear Astrophysics' at MAHE, Manipal, India

- **2023, 16 - 19 October** : Contributed talk on 'Low-resolution spectroscopic view of the Hosts of Tidal Disruption Events' in the international meeting '9th Annual BRICS Astronomy Workshop' at Cape Town, South Africa.
- **2023, 01 - 07 October** : Contributed talk on 'Low-resolution spectroscopic view of the Hosts of Tidal Disruption Events' in the international meeting '14th Gaia Science Alerts Workshop and ORP Time-Domain meeting' at Valletta, Malta.
- **2023, 03 - 05 April** : Contributed talk on the 'ambiguous nuclear-transients' in the 5th RETCO meeting at Kodaikanal Solar Observatory, Kodaikanal, India.
- **2022, 07 - 11 November**: Participating in the on-line conference SuperVirtual 2022 .
- **2022, 17 - 19 October** : Invited talk on the 'Recent Trends in SN research' in the conference on the "Role of meter class telescopes in modern day astronomy" at ARIES, Nainital, India.
- **2022, 04 - 07 October** : Contributed talk on the 'ambiguous nuclear-transients' in the 13th Gaia Science Alert Workshop and ORP Time-Domain meeting at Pula, Sardinia (*on-line participation*).
- **2022, 15 -20 May**: Contributed talk on the 'ambiguous cosmic transients' in the conference "Growing Black Holes: Accretion and merger" at Kathmandu, Nepal.
- **2021, 08 - 12 November**: Contributed talk (on-line participation) on Tidal Disruption Events in the conference "12th GAIA Science Alert Workshop" at Crete, Greece.
- **2019, 17 - 20 April**: Invited talk on “The nuclear transients” in the conference RETCO2019 organized by IUCAA between 17-20 April, 2019.
- **2019, 18 - 22 February**: Contributed a poster on the Bumps in the lightcurves of Super-luminous Supernovae in ASI 2019 at Bangalore, India.
- **2018, 05 - 07 December**: Contributory talk on “Transients near the centers of the galaxies” in the GROWTH conference organized by IITB, Mumbai.
- **2018, 14 - 17 November**: Contributory talk on “The natures of the nuclear-transients” in the conference EXUNIV2018 organized by SBNCBS, Kolkata.
- **2018, 20 - 31 August** : Attended the 30th General Assembly of the International Astronomical Union and presented a poster on radio galaxy.
- **2018, 05 - 09 February** : Contributory talk on “The Nuclear-transients” in ASI 2018 at Hyderabad, India.
- **2017, 06 - 08 December** : Oral presentation on Tidal Disruption of Stars by Supermassive Black Holes during the Eighth Gaia Science Alerts Workshop, at Astronomical Observatory of the University of Warsaw, Poland.
- **2017, 13 - 26 November** : Attended Workshop on AstroSat Data Analysis at IUCAA, Pune.
- **2017, 05 - 07 June** : Oral presentation on "Transients near the centers of the galaxies" in RETCO-III conference at IIST, Thiruvananthapuram.

- **2016, 10 - 13 May** : Oral presentation on "Luminous supernovae : implication of shock interaction on observed properties" in ASI-2016.
- **2015, 06 - 10 September** : Attended "ESO-ERIS European Radio Interferometry School 2015" held at ESO Garching, organized by European Southern Observatory (ESO).
- **2015, 23 - 28 August** : Summer school on "Monte Carlo Radiation Transfer" at University of St-Andrews, St-Andrews, Scotland. Also got "Dahlmack Grand" to attend this workshop.
- **2015, 22 - 26 June** : Poster presentation on SN 2012aa in EWASS 2015, at Tenerife.
- **2014, 02 - 10 August** : Contributed talk on the "Optical photometric and spectroscopic follow-up observations of the luminous Supernova 2012aa" in the conference "40th COSPAR Scientific Assembly" organized at University of Moscow, Moscow, Russia.
- **2013, 08 - 12 July** : Attended and gave talks and Poster in the EWASS 2013, at Turku, Finland.
- **2013, 20 - 22 February** : Contributed talk on "Photometric and Spectroscopic follow-up of Type Iin SN 2010jl" in the conference ASI-2013, organized at IIST, Thiruvananthapuram, India.
- **2013, 07 - 11 January** : Contributed speaker in the IAU Symposium 296 "Supernova environmental impacts", organized at Kolkata, India. The delivered talk was on "The Optical and Photometric and Spectroscopic Investigation of Type IIP SN 2012A". I also presented a poster on "Type Ib Supernova 2007uy – a multiwavelength perspective".
- **2011, 02 - 04 March** : Invited speaker in the meeting "Gamma ray bursts, evolution of massive stars and star formation at high redshifts" organized at ARIES, Nainital. The delivered talk was on "SN 2008in – Bridging the gap between normal and faint supernovae of Type IIP".
- **2011, 23 - 25 February** : Presented a poster in the meeting ASI-2011 organized at Raipur University entitled "Optical followup of core collapse supernovae 2010hq and 2010jl".
- **2010, 27 September - 11October** : Visited Dark Cosmology Center (**DARK**), University of Copenhagen, Copenhagen, Denmark under 'COSPAR' fellowship program. There I worked on core-collapse supernovae along with Dr. Justyn R. Maund on Type Ibc events.
- **2009, 12 – 16 October** : Invited speaker in the International Conference "Many Faces of GRBs : Optics Vs High Energy" at Special Astrophysical Observatory, Russia. The delivered talk was on "Optical study of Type II event SN 2008gz".
- **2009, 18 – 20 February** : Presented a poster in the meeting of ASI-2009 organized at Indian Institute of Astrophysics, Bangalore entitled "Optical photometric and spectroscopic follow-up of Type II SN 2008gz : First 70 days".
- **2008, 09 – 16 July** : Participated in the school on "Astro-Statistics" organized at Vainu Bappu Observatory, Kavalur, under IIA, Bangalore .
- **2008, 23 – 29 May** : Participated the school and workshop on "Supernovae and Gamma-Ray Burst at low-z & Epoch of Reionization" at Darjeeling organized by ITCS, TIFR, Bombay.

- **2008, 20 January – 02 February** : Participated “8th COSPAR Capacity Building Workshop” organized by COSPAR and University of Cairo, Egypt at Alexandria, Egypt.
 - **2007, 14 May – 04 July** : Attended RADIO ASTRONOMY SCHOOL, organized by NCRA, Pune to learn AIPS, a software required for radio data analysis.
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Publication of Rupak Roy

All the peer-reviewed scientific articles (published/accepted/under review) are in Scopus indexed Q1 journals. The impact factors main-journals are as given below:

- Monthly Notices of the Royal Astronomical Society (impact factor: 4.8)
 - The Astrophysical Journal (impact factor: 4.9)
 - Astronomy and Astrophysics (Impact factor: 5.4)
 - Nature (impact factor: 50.5)
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Peer-reviewed scientific articles (Under review) :

- (1) Study of a giant radio galaxy, J1520+0546, with three epochs of misaligned restarted jet activity**

Sumana Nandi, Marek Jamroz, **Rupak Roy**

Under review in Monthly Notices of the Royal Astronomical Society

Peer-reviewed scientific articles (Published/Accepted) :

- (1) A study in scarlet -- I. Photometric properties of a sample of Intermediate Luminosity**

Red Transients

G. Valerin et al. (**Rupak Roy** as co-author)

2025, Astronomy & Astrophysics, 695A, 42 (Doi: 10.1051/0004-6361/202451733)

- (2) The case of AT2022wtn: a Tidal Disruption Event in an interacting galaxy**

F. Onori, M. Nicholl, P. Ramsden, S. McGee, **R. Roy**, et al.

2025, Monthly Notices of the Royal Astronomical Society, 540, 498

(Doi: 10.1093/mnras/stae746)

- (3) A study in scarlet -- II. Spectroscopic properties of a sample of Intermediate Luminosity**

Red Transients

G. Valerin et al. (**Rupak Roy** as co-author)

2025, Astronomy & Astrophysics, 695A, 43 (Doi: 10.1051/0004-6361/202451735)

- (4) Massive stars exploding in a He-rich circumstellar medium ? X. Flash spectral features in the Type Ibn SN 2019cj and observations of SN 2018jmt.**

Z. Y. Wang, et al. (**R. Roy** as co-author)

2024, Astronomy & Astrophysics, 691A, 156 (Doi: 10.1051/0004-6361/202451131)

- (5) A Relook at the Black Hole Binary Candidate J1328+2752 with VLBI**

Sumana Nandi, Preeti Kharb, Anderson Caproni, **Rupak Roy**, Biny Sebastian

2024, The Astrophysical Journal, 965, 9

- (6) AT2020ohl: Its nature and probable implications**

Rupak Roy, Samir Mandal, D. K. Sahu, G. C. Anupama, Sumana Nandi, Brijesh Kumar
2024, *Monthly Notices of the Royal Astronomical Society*, 528, 6176
(Doi: 10.1093/mnras/stae395)

(7) Photometric and spectroscopic analysis of the Type II SN 2020jfo with a short plateau

B. Ailawadhi, R. Dastidar, K. Misra, **R. Roy**, et al.
2023, *Monthly Notices of the Royal Astronomical Society*, 519, 248
(Doi: 10.1093/mnras/stac3234)

(8) SN 2018bsz: A Type I superluminous supernova with aspherical circumstellar material

M. Pursiainen et al. (along with **R. Roy**)
2022, *Astronomy & Astrophysics*, 666A, 30 (Doi:10.1051/0004-6361/202243256)

(9) SN 2020acat: an energetic fast rising Type IIb supernova

K. Medler et al (along with **R. Roy**)
2022; *Monthly Notices of the Royal Astronomical Society*; 513, 5540
(Doi: 10.1093/mnras/stac1192)

(10) Double-peaked Lines, Dual VLBI Components, and Precessing Jets in J1328+2751

S. Nandi, A. Caproni, P. Kharb, B. Sebastian, **R. Roy**
2021, *The Astrophysical Journal*, 908, 178 (Doi: 10.3847/1538-4357/abd2ba)

(11) An outflow powers the optical rise of the nearby, fast-evolving tidal disruption event AT2019qiz

M. Nicholl et al. (along with **R. Roy**)
2020, *Monthly Notices of the Royal Astronomical Society*, 499, 482
(Doi: 10.1093/mnras/staa2824)

(12) The Rise and Fall of ASASSN-18pg : Following a TDE from Early to Late Times

Holoien et al. (along with **Rupak Roy**)
2020; *The Astrophysical Journal*, 898, 161 (Doi : 10.3847/1538-4357/ab9f3d)

(13) SN2018kzr: a rapidly declining transient from the destruction of a white dwarf

Owen R. McBrien, Stephen J. Smartt, Ting-Wan Chen, Cosimo Inserra, James H. Gillanders, Stuart A. Sim, Anders Jerkstrand, Armin Rest, Stefano Valenti, **Rupak Roy**, et al.

2019; *The Astrophysical Journal*, 885L, 23 (Doi : 10.3847/2041-8213/ab4dae)

(14) The spectral evolution of AT2018dyb and the presence of metal lines in Tidal Disruption Events

Giorgos Leloudas, Lixin Dai, Iair Arcavi, Paul M. Vreeswijk, Brenna Mockler, **Rupak Roy** et al.

2019; *The Astrophysical Journal*, 887, 218 (Doi : 10.3847/1538-4357/ab5792)

(15) A low-frequency study of recently identified double-double radio galaxies

S. Nandi, D. J. Saikia, **R. Roy**, P. Dabhade, et al.

2019; *Monthly Notices of the Royal Astronomical Society*; 486, 5158
(Doi : 10.1093/mnras/stz1184)

(16) A nearby superluminous supernova with a long pre-maximum 'plateau' and strong CII features

J. P. Anderson, P. J. Pessi, L. Dessart, C. Inserra, D. Hiramatsu, K. Taggart, S. J. Smartt, G. Leloudas, T.-W. Chen, A. Möller, **R. Roy**, et al.

2018, *Astronomy & Astrophysics*, 620A, 67 (Doi: 10.1051/0004-6361/201833725)

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