GOVERNMENT OF INDIA
MINISTRY OF SCIENCE & TECHNOLOGY
Department of Science & Technology
Technology Bhavan, New Mehrauli Road
New Delhi - 110016

Date: 10 August, 2015

Subject: INSPIRE Faculty Award - Offer letter[DST/INSPIRE/04/2015/000108]

Dear Dr. Mahadev Baburao Pandge

Government of India has launched a unique scheme **"Innovation in Science Pursuit for Inspired Research(INSPIRE)"** with several components. INSPIRE Faculty Scheme is one such component of INSPIRE Programme which offers a contractual research award for carrying out independent research to young achievers. Guidelines of the INSPIRE Faculty scheme and award is available at the website: www.inspire-dst.gov.in. Based on your application followed by the due selection process, I am pleased to inform you that you have been selected for **INSPIRE Faculty Award**.

A compensation matching cost equivalent to that of Assistant Professor of an IIT at the time of entry, along with Rs. 7000000.00 (@ Rs. 1400000.00/year) of research grant shall be offered to each Awardee. The Faculty Award is tenable for a period of five years from the date of joining the Faculty position. However, each Awardee as well as the Host Institute will be required to sign an 'UNDERTAKING' for implementation of this Faculty Award.

Each awardee will be required to inform DST on acceptance of the Award within 3 months from the date of this offer. This includes finalization of the Host Institute for implementation of this Award and joining at the selected Host Institute. In case Awardee does not inform DST within 3 months, the Award offer shall automatically be forfeited. Please note that the Host Institution shall be other than the Institute/ University/ Laboratory where you have completed your PhD work/degree.

You are requested to take necessary action towards implementing this Award. Towards this the following documents are required to upload at portal (www.online-inspire.gov.in), so that necessary funds can be released to Host Institute from our end:

1. Details of Bank Account of the Host Institute (not for individual Awardees)
2. Duly signed 'UNDERTAKING'
3. Year-Wise Budget for Research Grant @ Rs. 1400000.00 / year for 5 years (year-wise without clubbing)
4. Joining Report (Duly authenticated)

Login-ID and Password used at the time of submission of application shall be used now as well for upload. Without submission of these documents through online, no action would be possible to take at this end.

This issue's with the approval of Secretary DST vide Dy.No.6633 dated 07/31/2015. We shall be looking for your responses in this respect.

With Best Regards,

Sunit Minz
INSPIRE Program
Email: **sunit@nic.in**
Phone: 011-26590247
Fax: 011-26602193

To,
Dr. Mahadev Baburao Pandge[DST/INSPIRE/04/2015/000108]
C/O, Vishnu Hanmuntrao Sabde, Samrat Chowk, Nanded Road , Latur, M.S, India
Latur - 413512
MAHARASHTRA .

PRINCIPAL
Dayanand Science College
LATUR

Dayanand Education Society's

Dayanand Science College

Latur, Maharashtra (India)

(DST-FIST Sponsored College)

(Best College Award by SRTMU, Nanded)

(Affiliated to - Swami Ramanand Teerth Marathwada University, Nanded)

Establishment : June 1961
Independent : 1967
Reaccridited 'A' Grade

- Phone No.: (02382) 221149, 222929
- Fax No.: (02382) 221149
- E-mail : daya_scin1@ radiffmail. com
- Website : www.dsclatur. org

Laxmiraman Lahoti — President
Dr. Jaiprakash Dargad — Principal
Ramesh Biyani — Secretary

Ref. No.: INSPIRE/2015-16/ 1999

Date : 09.09.2015

To,
Dr. Pandge Mahadev B.
C/O Vishnu Hanumantrao Sabde,
Samrat Chowk,
Latur- 413512

Subject :- Joining as a DST_INSPIRE_Faculty.

Reference :- Your application dated 5th Sept., 2015.

Sir,

With reference to your application to join as **"DST_INSPIRE_Faculty"** at our institute, we are pleased to inform you that the management has granted and allowed you to join as a INSPIRE Faculty in our institute. You are informed to do the further necessary formalities.

Yours,

R.

Principal

Dr. Mahadev Pandge, Ph.D.

mbpandge@gmail.com, mbpandge@associates.iucaa.in
http://dsclatur.org/ +91-9881340347
Address: Department of Physics, Electronics and computer Science,
Dayanand Science College,
Latur, Maharashtra, India. 413512

Employment History

2020 – · · · ·	**SERB Research Scientist,** Dayanand Science College, Latur, Maharashtra, India.
2016 – 2019	**SERB Young Scientist,** Dayanand Science College, Latur, Maharashtra, India.
2015 – 2020	**INSPIRE Faculty,** Dayanand Science College, Latur, Maharashtra, India.
2014 – 2015	**Assistant Professor,** Department of Physics and Electronics, Rajarshi Shahu College, Latur, Maharashtra, India.
2007 – 2009	**Production Engineer,** Messung System, Pune, Maharashtra, India.

Education

2009 – 2014	**Ph.D.**, School of Physical Sciences, Swami Ramanand Teerth Marathwada University, Nanded, Maharashtra, India. Thesis title: *"Multi-band Imaging Observations of Early Type galaxies".* Thesis Supervisor: **Prof. Madhav Patil**; Ph.D Defence 5^{th} September 2014
2005 – 2007	**M.Sc. Physics (Astrophysics),** School of Physical Sciences, Swami Ramanand Teerth Marathwada University, Nanded, Maharashtra, India (**Gold Medal**). Thesis title: *"Morphological Study of Supernova 1987A".* Thesis Supervisor: **Prof. Madhav Patil**
2002 – 2005	**B.Sc.,** Rajarshi Shahu College, Latur, Maharashtra, India.

Teaching

Dayanand Science College, Latur.

2017-2018	Electronic Devices and its applications, Theory Course, PG (M.Sc. Physics) (First Semester).
2020-2021	Microprocessor and its Applications, Theory Course, UG (B.Sc. Electronics) (Third semester).
	Atomic and Molecular Physics, Theory Course, M.Sc. Physics (first Semester).
	Amplifiers, Theory Course, UG (B.Sc. Electronics) (Third Semester).

Rajarshi Shahu College, Latur

2014-2015	Electronic Devices and its applications, Theory Course, PG (M.Sc. Physics) (First semester).
	Basic Electronics, Theory Course, UG (B.Sc. Electronics) (First Semester).

Skills

Languages	English, Marathi, Hindi.
Coding	IDL, Python, R, LaTeX, …
Plotting	Gnuplot, matplotlib in python, PGPLOT, Origin.
Numerical	Mathematica, Numerical recipes, scipy.
Astronomical Data	Chandra, XMM-Newton, AstroSat, HST.

Skills (continued)

Data Analysis Softwares	CIAO, SAS, VLT-Pipeline, HST-Pipline, CASA (Bigner). Expertise in Chandra Interactive Analysis of Observations (CIAO) software and Scientific Analysis System (SAS) XMM Newton data analysis software, XSPEC An X-Ray Spectral Fitting Package.
Operating Systems	LINUX, WINDOWS, MAC.
Text Processing	LaTeX, MS Office, OpenOffice.

Achievements

Awards:

2017 "Determination of the size of the dust torus in H0507+164 through Optical-IR monitoring", Amit Kumar Mandal, **M.B. Pandge**, C.S Stalin; at the 35^{th} meeting of the Astronomical Society of India (ASI 2017), which was held at B. M. Birla Auditorium, Jaipur, during March 6—10, 2017. (**The Best Poster Presentation award**)

2010 Awarded "**Certificate of Second Pries**" for poster presentation in the regional conference which was held at Dayanand Art and Science College, Solapur, during February 5—6 2010.

2007 Awarded University First Ranker "**Certificate of Merit**" form Swami Ramanand Teerth Marathwada University, Nanded.

Fellowships:

2020-2022 **SERB Research Scientist Fellowship,** from the Science And Engineering Research Board, New Delhi.

2016-2020 **Young Scientist Fellowship,** from the Science And Engineering Research Board, New Delhi.

2015–2020 **INSPIRE Faculty Fellowship,** from the Department of Science and Technology (DST) New Delhi.

2010-2014 **INSPIRE Fellowship**, from the Department of Science and Technology (DST) New Delhi.

Professional Memberships

2020 Appointed as a member of Athena Topical Panels "**SWG 1.1 The evolution of galaxy groups and clusters**", co-chaired by S.W. Allen, N. Ota, E. Pointecouteau; this panel forms part of the "SWG1 Hot Universe" working group, co-chaired by A.C. Fabian, Th. Reiprich and T. Ohashi.

Appointed as a member of Athena Topical Panels "**SWG 1.3 AGN feedback in galaxy clusters and groups**", co-chaired by J.H. Croston, J. Sanders, B. McNamara; this panel forms part of the "SWG1: Hot Universe" working group, co-chaired by A.C. Fabian, Th. Reiprich and T. Ohashi.

2019 Appointed as a member of ("**School Advisory Board**") in School of Physical Science Swami Ramanand Teerth Marathwada University, Nanded.

Indian Physics Association : (**Life Time Membership No:GEN/LM/ 13379**)

Indian Association of Physics Teachers (AIPT): (**Life Time Membership No: L81347**)

2018 International Astronomical Union (**IAU**): (Junior Member).

Selected as a visiting faculty at Inter-University Center for Astronomy and Astrophysics (IUCAA), Pune.

2017 Member of continuum survey SKA-India science working group for the Square Kilo-metre Array, India.

Achievements (continued)

2012 Astronomical Society Of India (ASI): (**Life Time Membership No: L 2061**)

2011 Committee on Space Research (COSPAR) : (**Associate**)

Grants:

2020 I have been awarded "**AstroSat Data Utilization Grant**" from India Space Research Organization for three years.

2013 I have been awarded an international "**COSPAR**" travel grant in support of my participation in High-Energy Astrophysics: "**An advance School for Asian Astronomers**" (2—13 September 2013 in Xuyi, China) to the value of $500.

2012 I have been awarded an international "**IAU**" travel grant in support of my participation at the XXVIII IAU General Assembly (20—31 August 2012 in Beijing, China) to the value of (euro 1500).

2011 I have been awarded an international travel grant in support of my participation at "**European Radio Interferometry School 2011 (ERIS 2011)**" held in September 5—10, 2011 organized by INAF Rimini, Italy, to the value of (euro 1500).

I have been awarded an international travel grant in support of my participation in first Sardinia summer school in astrophysics "**Single—dish Radio Astronomy and Radio Science**" held at Santa Margherita di pula from September 12—17, 2011 , Italy, to the value of (euro 1500).

I have been awarded an international travel grant (CSIR + Winchester university) in support of my participation in the Conference on "**Black Hole Astrophysics: Tales of Power and Destruction**" which was held at Winchester, United Kingdom, UK , during July 18—22 2011 to the value of (euro 2000).

Scientific Journal Reviewer:

2019 Invited as a reviewer for prestigious international Journal Monthly Notice Royal Astronomical Society (MNRAS) UK.

2018 Invited as a reviewer for National Journal of Astrophysics and Astronomy (JOAA), India.

Research Experience

2010–2014 **INSPIRE Fellow Award**, Under the "Assured Opportunity for Research Career (AORC)" a component of INSPIRE program for students admitted for pursuing full-time doctoral (ph.D) program from DST India.

2009-2010 **Research Fellow**, Under the UGC Major research project entitled "Optical and X-ray Properties of Early-Type galaxies" sanctioned to Prof. Madhav Patil, School of Physical Sciences, Swami Ramanand Teerth Marathwada University Nanded, Mah, India.

Scientific Fields of Interest

Astronomy and Astrophysic

I am mainly interested to study the evolution of group and cluster dominant galaxies, AGN feedback operated at their cores, using the optical, X-ray, radio, infrared and ultraviolet observations to understand how the transformations of non-gravatational energy occurs onto their local and global surrounding gaseous environments and its impact.

Research Ids

ORCID	**0000-0002-9699-6257**
Google Scholar ID	**t5-MQNMAAAAJ**
Web of Science ResearcherID	**AAM-9323-2021**
SCOPUS	**44861629300**

Research Publications

Journal Articles

1. Pandge, M. B., Sebastian, B., Seth, R., & Raychaudhury, S. (2021). A detailed study of X-ray cavities in the environment of the cool core cluster Abell 3017. *mnras*. doi:10.1093/mnras/stab384. arXiv: 2102.04650 [astro-ph.CO]

2. Mirakhor, M. S., Walker, S. A., Bagchi, J., Fabian, A. C., Barth, A. J., Combes, F., … Pandge, M. B. (2021). Exploring the hot gaseous halo around an extremely massive and relativistic jet launching spiral galaxy with XMM-Newton. *mnras*, *500*(2), 2503–2513. doi:10.1093/mnras/staa3404. arXiv: 2010.15131 [astro-ph.GA]

3. Pandge, M. B., Monteiro-Oliveira, R., Bagchi, J., Simionescu, A., Limousin, M., & Raychaudhury, S. (2019). A combined X-ray, optical, and radio view of the merging galaxy cluster MACS J0417.5-1154. *mnras*, *482*(4), 5093–5105. doi:10.1093/mnras/sty2937. arXiv: 1810.12071 [astro-ph.CO]

4. Pandge, M. B., Sonkamble, S. S., Parekh, V., Dabhade, P., Parmar, A., Patil, M. K., & Raychaudhury, S. (2019). AGN Feedback in Galaxy Groups: A Detailed Study of X-Ray Features and Diffuse Radio Emission in IC 1262. *apj*, *870*(2), 62. doi:10.3847/1538-4357/aaf105. arXiv: 1811.05647 [astro-ph.GA]

5. Mandal, A. K., Rakshit, S., Kurian, K. S., Stalin, C. S., Mathew, B., Hoenig, S., … Pandge, M. B. (2018). Determination of the size of the dust torus in H0507+164 through optical and infrared monitoring. *mnras*, *475*(4), 5330–5337. doi:10.1093/mnras/sty200. arXiv: 1801.07018 [astro-ph.GA]

6. Iqbal, A., Kale, R., Majumdar, S., Nath, B. B., Pandge, M., Sharma, P., … Raychaudhury, S. (2017). Active Galactic Nucleus Feedback with the Square Kilometre Array and Implications for Cluster Physics and Cosmology. *Journal of Astrophysics and Astronomy*, *38*(4), 68. doi:10.1007/s12036-017-9491-4. arXiv: 1705.04444 [astro-ph.CO]

7. Pandge, M. B., Bagchi, J., Sonkamble, S. S., Parekh, V., Patil, M. K., Dabhade, P., … Jacob, J. (2017). MACS J0553.4-3342: a young merging galaxy cluster caught through the eyes of Chandra and HST. *mnras*, *472*(2), 2042–2053. doi:10.1093/mnras/stx2028. arXiv: 1701.00197 [astro-ph.CO]

8. Biju, K. G., Bagchi, J., Ishwara-Chandra, C. H., Pandey-Pommier, M., Jacob, J., Patil, M. K., … Djorgovski, S. G. (2017). 'Zwicky's Nonet': a compact merging ensemble of nine galaxies and 4C 35.06, a peculiar radio galaxy with dancing radio jets. *mnras*, *471*(1), 617–628. doi:10.1093/mnras/stx1476. arXiv: 1607.05080 [astro-ph.GA]

9. Parekh, V., Durret, F., Padmanabh, P., & Pandge, M. B. (2017). A hot X-ray filament associated with A3017 galaxy cluster. *mnras*, *470*(3), 3742–3749. doi:10.1093/mnras/stx1457. arXiv: 1705.07344 [astro-ph.GA]

10. Sahu, S. K., Navale, N. R., Pandey, S. K., & Pandge, M. B. (2017). Optical imaging and spectral study of FR-I type radio galaxy: CTD 086 (B2 1422+26B). *apss*, *362*(9), 158. doi:10.1007/s10509-017-3139-3. arXiv: 1707.05052 [astro-ph.GA]

11. Pandge, M. B., Dewangan, G. C., Singh, K. P., & Patil, M. K. (2013). A multi-wavelength study of nuclear activity and environment of low-power radio galaxy CTD 86. *mnras*, *435*(4), 3385–3394. doi:10.1093/mnras/stt1531. arXiv: 1212.6171 [astro-ph.CO]

12 Vagshette, N. D., Pandge, M. B., & Patil, M. K. (2013). Spectral properties of XRBs in dusty early-type galaxies. *na*, *21*, 1–7. doi:10.1016/j.newast.2012.10.005. arXiv: 1205.6057 [astro-ph.CO]

13 Pandge, M. B., Vagshette, N. D., Sonkamble, S. S., & Patil, M. K. (2013). Investigation of X-ray cavities in the cooling flow system Abell 1991. *apss*, *345*(1), 183–193. doi:10.1007/s10509-013-1366-9. arXiv: 1301.2928 [astro-ph.CO]

14 Vagshette, N. D., Pandge, M. B., Pandey, S. K., & Patil, M. K. (2012). Dust extinction and X-ray emission from the starburst galaxy NGC 1482. *na*, *17*(5), 524–532. doi:10.1016/j.newast.2011.12.005. arXiv: 1202.2434 [astro-ph.CO]

15 Pandge, M. B., Vagshette, N. D., David, L. P., & Patil, M. K. (2012). Systematic study of X-ray cavities in the brightest galaxy in the Draco constellation NGC 6338. *mnras*, *421*(1), 808–817. doi:10.1111/j.1365-2966.2011.20358.x. arXiv: 1202.1364 [astro-ph.CO]

16 Bagchi, J., Sirothia, S. K., Werner, N., Pandge, M. B., Kantharia, N. G., Ishwara-Chandra, C. H., … Joshi, S. (2011). Discovery of the First Giant Double Radio Relic in a Galaxy Cluster Found in the Planck Sunyaev-Zel'dovich Cluster Survey: PLCK G287.0+32.9. *apjl*, *736*(1), L8. doi:10.1088/2041-8205/736/1/L8. arXiv: 1104.5551 [astro-ph.CO]

Conference Proceedings

1 Sahu, S. K., Pandey, S. K., Chaware, L., & Pandge, M. B. (2016). Multiphase ISM in low luminosity radio galaxies: A case study of NGC 708. In P. Jablonka, P. André, & F. van der Tak (Eds.), *From interstellar clouds to star-forming galaxies: Universal processes?* (Vol. 315, E70). doi:10.1017/S1743921316008322. arXiv: 1603.08377 [astro-ph.GA]

2 Sahu, S. K., Chaware, L., Pandey, S. K., Kulkarni, S., Pandge, M. B., & Chakradhari, N. K. (2014). Multiwavelength Study of Radio Loud Early-Type Galaxies from the B2 Sample. In A. M. Mickaelian & D. B. Sanders (Eds.), *Multiwavelength agn surveys and studies* (Vol. 304, pp. 353–354). doi:10.1017/S1743921314004293

Paper Presented In Conference

- "Discovery of MPC-SCALE X-ray Tail and third surface brightness edge in MACS0553.4-3342" XIth Marseille Cosmology Conference Galaxy clusters across cosmic time, **M.B. Pandge**, Joydeeo Bagchi; organized by the Laboratoire d'Astrophysique de Marseille, which was held in Aix-En-Provence from July $10^{th} - 13^{th}$ 2017.
- "Cosmic filaments around galaxy clusters", Prajwal V. P, Viral Parekh, **M.B. Pandge**, Joydeeo Bagchi; in the 35^{th} meeting of the Astronomical Society of India (ASI 2017), which was held at B. M. Birla Auditorium, Jaipur, during March 6—10, 2017.
- "Determination of the size of the dust torus in H0507+164 through Optical-IR monitoring", Amit Kumar Mandal, **M.B. Pandge**, C.S Stalin; in the 35^{th} meeting of the Astronomical Society of India (ASI 2017), which was held at B. M. Birla Auditorium, Jaipur, during March 6—10, 2017.
- "Long term X-ray variability characteristics of Black Hole Binary GRS 1915+105", Nilam Navale, Anjali Rao, A. R. Rao, Yesh Bhargava, **M.B. Pandge** ; in the 35^{th} meeting of the Astronomical Society of India (ASI 2017), which was held at B. M. Birla Auditorium, Jaipur, during March 6—10, 2017.
- "Discovery of MPC-SCALE X-ray Tail In MACS0553.4-3342", **M.B. Pandge**, S.S. Sonkamble, Joydeep Bagchi, M. K. Patil, Pratik Dabhade, Jacob Joe, Somak Raychaudhury, Nilam Navale; in the 35^{th} meeting of the Astronomical Society of India (ASI 2017), which ws held at B. M. Birla Auditorium, Jaipur, during March 6—10, 2017.
- "The Chandra observation of Galaxy cluster Abell 1991". **M.B. Pandge**, S.S .Sonkamble, N. D. Vagshette, M. K. Patil; in the IAU GA Meeting which was held in China, during 22—30 August 2012.
- "Multi—Wavelength Analysis of Intermediate Class Absorption Line Galaxies in CFHTLS Field." **M.B. Pandge**, C.S.Stalin, R.Srianand, P.Petijean, M.K.Patil; in the conference of 39th COSPAR Scientific Assembly, 14—22 July 2012 Mysore, India.

Paper Presented In Conference (continued)

- "X−ray Bright Optically Dull AGN's In CFHTLS Field", **M.B. Pandge** in the conference on Observational X-ray Astronomy "X−ray View of Cosmos" which was held at PRL, Ahmedabad, during 23−25 April 2012.
- "Detail investigation of X-ray cavity in NGC 6338", **M.B. Pandge**, N. D. Vagshette, L. P. David, M. K. Patil; in the Conference on Black Hole Astrophysics: Tales of Power and Destruction" which was held at Winchester, United Kingdom, during July 18−22 2011.
- "Spectral properties of LMXBs in dust lane early−type galaxies", N. D. Vagshette, **M.B. Pandge**, M. K. Patil; in the Conference on wideband X-ray astronomy: frontiers in timing and spectroscopy, which was held at IUCAA, Pune, India, during January 13−16, 2011.
- "Investigation of X−ray cavities in cooling flow cluster galaxies", **M.B. Pandge**, Deshmukh S.P, M. K. Patil, R.Srianand, S. K. Pandey; in the 29^{th} meeting of the Astronomical Society of India (ASI 2011), which was held at Pt. R.S., University, Raipur, during February 23−25, 2011.
- "Morphological and spectroscopy of X-ray emitting sources in 4 early type galaxies", **M.B. Pandge**, M. K. Patil, N. D. Vagshette; in the conference Young Astronomer Meet, which was held at Physical Research Laboratory Ahmadabad, during 3−5 September 2010.
- "Star formation history using H_α and IR observation", N. D. Vagshette, **M. B. Pandge**, M. K. Patil; in National seminar on recent advances in helio physics organized by Department of Physics, Dayanand College Solapur, during February 5−6, 2010.

Conferences, Seminars, Meetings, Workshops and Schools attained

Conference

- Participated in the ICTS-IIA program "**Extragalactic Relativistic Jets: Cause and Effect**" which was held at ICTS campus, Bangalore, India from 12 to 20 October, 2015.
- Participated in International conference "**AstroSat view of AGN Central Engines**", held during December 18-21,2017 at the Inter-University Center for Astronomy and Astrophysics, Pune.
- Participated in International conference "**Galaxies: Normal and Active**" jointly organized by School of Physical Sciences S.R.T.M. University Nanded & IUCAA Pune, during December 17−20, 2012
- Participated in YAM2010 "**Young Astronomers Meet**" held at Physical Research Laboratory Ahmadabad, during 3−5 September 2010 and presented a talk on Morphology and spectroscopy of X−ray emitting sources in 4 early type galaxies.

Workshops

- Participated in "**Workshop on Galaxies in Absorption**", which was held during December 17−20, 2012 at the Inter-University Center for Astronomy and Astrophysics, Pune.
- Participated in "**CLOUDY Workshop**", which was held during September 21−26,2015 at the Inter-University Center for Astronomy and Astrophysics, (IUCAA) Pune.
- Participated in workshop on "**Astrosat DATA Analysis**", which was held during November 13−26,2017 at the Inter-University Center for Astronomy and Astrophysics, Pune.

Conferences, Seminars, Meetings, Workshops and Schools attained (continued)

- Participated in the workshop on "**Current Trends In Physics Education A Tribute to Albert Einstein**" held at Science College, Nanded. On the eve of world year of Physics 2005 on 30, Dec 2006.

- Participated in the workshop "**The Fundamental of Quantum Mechanics and Astrophysics**" which was held at Swami Ramanand Teerth Marathwada University, Nanded, during 20—21 December 2006.

- Participated in "**Chandra/CIAO workshop**" which was held at National Centre for Radio Astrophysics, Tata Institute of Fundamental Research, (& NCRA-TIFIR), Pune, during October 23—27, 2017.

- Participated in "**Workshop on Astronomy with Small Telescopes**" during December 8—11, 2015, Jointly organized by School of Physical Sciences, S.R.T.M. University, Nanded & IUCAA Pune.

Resource Person

- Invited as a resource person in the "**Regional Workshop on Research Methodology for Ph.D students**" organized by Dept of Mathematics, Dayanand Science college Latur, during June 6—11 2016
- Acted as a organizing committee member in "**International Workshop on LIGO-India (IWLI-2019)**" which was held at Swami Ramanand Teerth Marathwada University, Nanded, during December 15-16, 2019.

Schools

- Participated in "**Indo-French School on Optical Spectroscopy**" which was held at Inter—University center for Astronomy and Astrophysics (IUCAA), Pune, during November 23—28, 2015.

- Participated in International workshop-cum school "**The Franco-Indian school on From reionization to large scale structure a multiwavelength approach**", which was held during February 11—17, 2018 at the Inter-University Center for Astronomy and Astrophysics, Pune.

- Participated in "**European Radio Interferometry School 2011 (ERIS 2011)**" which was held at INAF Rimini, Italy, during September 5—10, 2011.

- Participated in first Sardinia summer school in astrophysics "**Single—dish Radio Astronomy and Radio Science**" which was held at Santa Margherita di pula, during September 12—17, 2011, Italy.

- Participated in "**Radio Astronomy School 2011 (RAS 2011)**" which was held at National Centre for Radio Astrophysics and Tata Institutes of Fundamental Research, Pune, during July 4—14, 2011.

- Participated in IGO "**IUCAA Giravali Observatory Training School**" which was held at Inter University center for Astronomy and Astrophysics (IUCAA), Pune, during April 1—30, 2010. **Only five were selected from INDIA.**

visits

2017 — Visited Dr. C.S Stalin, IIA, Banglore in November, 2017 for one month under the collaborative research program.

2010–2020 — Visited IUCAA many times for doing and discussion of the collaborative research projects..

2018 — Visited NCRA for discussion on Science Working Group SKA-India road map and collaborative interactions.

Observing Experience

- Observation and working experience with 2m world class IUCAA Girawali Optical Telescope.
- Observation and working experience with GMRT (Gaint Meter Wave Radio Telescope) NCRA Pune.

OBSERVING PROPOSALS

- "Low radio frequency study of MACSJ0553.4-3342 using uGMRT". PI- Mahadev Pandge, Pratik Dabhade. **Submitted to GMRT dated 15 January 2018**.
- "Unveiling the nature of the merging galaxy cluster MACSJ0553.4-3342". (PI- Rogério Monteiro-Oliveira), **Mahadev Pandge**, Joydeep Bagchi. **Submitted to Gemini GMOS South optical telescope**.
- "Deep uGMRT observation of binary cluster A3016/A3017". (PI- Viral Parekh), Joydeep Bagchi, **Mahadev Pandge**, Prajwal Padmanabh. **Submitted to GMRT dated 15 January 2017**.
- "Optical and IR monitoring of Syfert I galaxies". (PI- Amit Kumar Mandal), Suvendu Rakshit, **Mahadev Pandge**, Ram Sagar, C.S. Stalin. **Submitted to HCT Hanle Optical Telescope**.
- "Radio Jet Inflated X-ray cavities in the poor cluster cooling flow system NGC 6338": (PI- Prof. M. K. Patil, **Mahadev Pandge**). **Submitted to GMRT dated July 14, 2011**.
- "GMRT observation of Radio source 4C 35.06: Precessing jets and AGN feedback from a cD galaxy under Assembley". (PI- Joydeep Bagchi, **Mahadev Pandge**). **Submitted to GMRT dated July 14, 2011**.
- "Probing the time variability of low ionization broad absorption line systems". (PI- Prof. R. Shrianand, **Mahadev Pandge**). **Submitted to (IUCAA GIRAWALI OBSERVATORY) cycle 2011A dated November 21, 2010.**
- "Interaction between the radio jets and ICM in the cooling flow galaxies". (PI- Prof. M. K. Patil, **Mahadev Pandge**). **Submitted to GMRT dated January 15, 2014**.

Science Outreach

2017–2018 — **Invited Talk**, given for high school students at the “Night Sky Watching Program" (Total Lunar Eclipse) which was organized by Raja Narayanlal Lahoti High School, Latur.

2015–2020 — **Organised Night Sky Observations**, for INSPIRE Camp students, Dayanand Science College Latur.

2010–2014 — Actively participated in the S.R.T.M, University Naded Science outreach program for high school students and explained various astrophysical aspects to the students.

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