

CURRICULUM VITAE



Dr. Govind G. Nampoothiri

Planetary Science Branch

Research Associate - I

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EDUCATION

2014 - 2022: PhD (Physics), Space Physics Laboratory, VSSC, ISRO. On 20-01-2023, PhD was awarded by Cochin University of Science and Technology (CUSAT), Kerala, India.

2011 - 2013: MSc. Physics (Specialisation in High Energy Physics), Hyderabad Central University, Hyderabad, Telangana, India.

2007 - 2010: BSc. Physics, St. Berchman's College, Mahatma Gandhi University, Kottayam, Kerala, India.

RESEARCH INTERESTS

Solar Physics: Solar coronal expansion, solar wind and its evolution in the heliosphere, non-thermal electrons in the solar wind Electron Velocity Distribution Functions (EVDFs) in the Kinetic theory of solar wind, solar wind particle acceleration mechanisms, Solar coronal heating. Solar wind disturbances generated by solar transient events [coronal mass ejections (CMEs) and solar flares] in interplanetary space, Entropy and information flow of interplanetary CMEs.

ACADEMIC AWARDS AND FELLOWSHIPS

- Qualified National Graduate Aptitude Test in Engineering (GATE-2015) in Physics conducted by Ministry of Human Resource Development (MHRD), Government of India.
- Awarded Junior Research Fellowship (JRF-2014) conducted by Space Physics Laboratory (SPL), Indian Space Research Organisation (ISRO), Department of Space (DOS), Government of India.
- Awarded post-graduate fellowship (2011) conducted by Hyderabad Central University (HCU), MHRD, Government of India.
- Qualified Joint Admission Merit test (JAM-2011) in Physics conducted by MHRD, Government of India.
- Qualified Joint Admission Merit test (JAM-2010) in Geophysics conducted by MHRD, Government of India.

SKILLS

- Familiar with Linux and Windows operating systems
- Familiar with IDL 7.1, FORTRAN 95, Python, Simion 8.1, Octave 2.3, Matlab, Origin.
- Familiar with Solar wind data analysis using space physics data from OMNI Web and Coordinated Data Analysis (CDA) Web of SPDF, NASA, GSFC.
- Familiar with CME data analysis from SOHO LASCO CME catalogue
- Familiar with Solar wind Exospheric model 1.24, Community Coordinated Modelling Center (CCMC), <http://ccmc.gsfc.nasa.gov>.

WORKSHOPS AND CONFERENCES

- *Workshop on Solar Astrophysics, 19-20 January 2015*, held at Regional Science Centre & Planetarium, Calicut & Providence Women's College, Calicut with support from Inter-University Centre for Astronomy & Astrophysics (IUCAA), Pune, India.
- Poster presentation in the *Dynamic Sun: 1. Conference, 22-26 February 2016*, Varanasi, India, Organised by Department of Physics, Indian Institute of Technology (IIT-BHU), Varanasi & Space Systems Laboratory (SSL), The Solar Physics and Space Plasma Research Centre, The University of Sheffield, UK.
- Poster presentation in the *National Space Science Symposium (NSSS-2016), 9-12 February 2016*, Trivandrum, India, Organised by Space Physics Laboratory (SPL), Vikram Sarabhai Space Centre (VSSC), Indian Space Research Organisation (ISRO), Trivandrum, India.
- SCOSTEP – ISWI International Workshop on Space Science, 07-17 November 2017, Sangli, Maharashtra, India.
- 35th annual meet of Astronomical Society of India (ASI), March 06-10, 2017, Birla Science Centre, Jaipur, Rajasthan.

- Oral presentation at the PLSAMA-2017 conference organized by Plasma Science Society of India (PSSI), 07-10 November 2017, Institute for Plasma Research (IPR), Gandhinagar, India.
- COSPAR capacity-building workshop on “Coronal and Interplanetary Shocks: Analysis of Data from SOHO, Wind, and e-CALLISTO”, 2018, Mekelle University, Ethiopia.

CONFERENCE PROCEEDINGS

1. “A novel technique for the characterization of low energy electron beam under high vacuum conditions.”, R. Satheesh Thampi, Alaka Ann, Vipin K Yadav, **Govind G. Nampoothiri**, Abhishek J.K, Aneesh A.N and Anil Bhardwaj., 29th National Symposium on Vacuum Technology and its application to Electron Beams (IVSNS-2015), (Page No.89-92).
2. “Study of Radial Distribution of the Electron Velocity Distribution Function from Sun to Earth.” **Govind G. Nampoothiri**, R. Satheesh Thampi and Anil Bhardwaj. Dynamics Sun: 1. MHD Waves and Confined Transients in the Magnetized Atmosphere (2016). (Page No.127)
3. “Electron velocity distribution functions in the solar wind at 1 AU during solar transient events.”, **Govind G. Nampoothiri**, J.K. Abhishek, R. Satheesh Thampi, Anil Bhardwaj and L.B.Wilson III, PLASMA-2017., 32nd PSSI Meeting. (Page No. 514-515).

PUBLICATIONS IN PEER-REVIEWED JOURNALS

1. P. Janardhan, Santosh Vadawale, Bhas Bapat, K.P Subramanian, D. Chakrabarty, Prashant Kumar, Aveek Sarkar, Nandita Srivastava, R. Satheesh Thampi, Vipin K Yadav, M.B Dhanya, **Govind G. Nampoothiri**, J.K Abhishek, Anil Bhardwaj and K. Subhalakshmi., “Probing the heliosphere using in situ payloads onboard Aditya-L1”. CURRENT SCIENCE, VOL.113, NO.4, 620-624 (2017). DOI = 10.18520/cs/v113/i04/620-624.
2. Smitha V Thampi, C. Krishnaprasad, **Govind G. Nampoothiri**, Tarun K Pant, “The Impact of a Stealth CME on the Martian Topside Ionosphere”, Monthly Notices of the Royal Astronomical Society, 503, 625-632 (2021). DOI = 10.1093/mnras/stab494.
3. **Govind G. Nampoothiri**, R. Satheesh Thampi, Smitha V. Thampi, Tarun K Pant, JK Abhishek, “Nature and Variability of the Electron Velocity Distribution Functions and the Nonequilibrium Boltzmann Entropy in the Solar Wind at the First Lagrangian (L1) Point During the Halo CME Event on 25 July 2004”., Solar Physics, 296.11, 1-26 (2021). DOI = 10.1007/s11207-021-01900-7.

बायोडेटा

व्यक्तिगत जानकारी

डॉ. गोविंद जी नंपूतीरी

शोध सहयोगी - I

अंतरिक्ष भौतिकी प्रयोगशाला

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शैक्षणिक योग्यता

डिग्री	वर्ष	कॉलेज/विश्वविद्यालय
बीएससी (भौततकी)	2007 - 2010	सैंट.बेरचमन्स कॉलेज
एमएससी (कण भौतिकी)	2011 - 2013	हैदराबाद विश्वविद्यालय
पीएच.डी. (सौर भौतिकी)	2014 - 2022	कोचीन विज्ञान ओर पप्रौध्योगिकी विश्वविद्यालय

पेशेवर अनुभव

पदनाम	अवधि	संस्थान
अनुसंधान सहयोगी	ओक्टोबर 2022 – वर्तमान	अंतरिक्ष भौततकी प्रयोगशाला, वीएसएससी, इस्रो
सीनियर रिसेयर्च फ़ैलो	जनवरी 2016 - जनवरी 2019	अंतरिक्ष भौततकी प्रयोगशाला, वीएसएससी, इस्रो
जूनियर रिसेयर्च फ़ैलो	जनवरी 2016 - जनवरी 2019	अंतरिक्ष भौततकी प्रयोगशाला, वीएसएससी, इस्रो