Aheesh Chandrakant Hegde

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Email: aheesh.hegde@niser.ac.in **Phone:** (+91) 8431875757

Gender: Male **Date of birth:** 14/11/2001 **Nationality:** Indian

WORK EXPERIENCE

[07/2023 – 05/2024]

Masters Thesis Project - Simulation and Building of Imaging Setup using THGEM detector

Prof. Bedangadas Mohanty & Dr. Shuddha Dasgupta, National Institute of Science Education & Research

City: Bhubaneswar | **Country:** India

[05/2023 – 07/2023]

Summer Internship Project- Triple-GEM Detector Performance Study

Dr. Saikat Biswas, Associate Professor, Bose Institute

City: Kolkata | **Country:** India

[09/2022 – 12/2022]

Integrated Physics Lab - Muon Lifetime Detection with Scintillator and PMT

National Institute of Science Education and Research

City: Bhubaneswar | **Country:** India

[03/2021]

Attendee of International Particle Physics Masterclass

ALICE with U. Jammu

City: Online

[12/2019 – 01/2020]

NIUS 17.1 Participant

HBCSE, TIFR

City: Online

[2019 – 2023]

Core Committee Member

NISER Astronomy Club

City: Bhubaneswar | **Country:** India

- Telescope handling (Setting up of 6", 8", 11" telescopes)
- Speaker, Event Coordinator

[2015]

INSPIRE Award State Level Participant

City: Shivamogga | **Country:** India

EDUCATION AND TRAINING

[2019 – 2024]

Integrated M.Sc.

National Institute of Science Education and Research https://www.niser.ac.in

City: Bhubaneswar | **Country:** India | | **Final grade:** AB

[2018 – 2019]

12th

SGV Mahesh PU College

City: Belagavi | **Country:** India | **Field(s) of study:** Physics (93), Chemistry (98), Mathematics (94), Biology (91) | **Final grade:** 93.67%

[2015 – 2017]

10th

SKB English Medium High School

City: Kansur, Karnataka | **Country:** India | | **Final grade:** 97.12%

DIGITAL SKILLS

My Digital Skills

Python | C++ | CERN-ROOT | GEANT4 | Mathematica | Pythia | LaTeX

PUBLICATIONS

[2024] **Investigation of the stability in the performance of triple GEM detectors for High Energy Physics experiments**

Reference: S. Mandal et. al., NIM-A, Volume 1064, 2024, 169389, ISSN 0168-9002,

Abstract: Gas Electron Multiplier (GEM) is one of the mostly used technologies in the High Energy Physics (HEP) experiments. GEMs are widely used as tracking devices due to their high-rate handling capability and good position resolution.

An initiative is taken to study the stability in performance of the GEM chamber prototypes in the laboratory using external radiation for Argon/CO2 gas mixture in 70/30 volume ratio. The effect of ambient parameters on the gain and energy resolution are studied. Very recently some behavioural changes in the performance of a single-mask GEM chamber is observed. The details of the experimental setup, methodology and results are reported here.

[2024] **Observation of some anomalous behavior in GEM Detector after long irradiation.**

Reference: Mandal, Subir & Sen, Arindam & Chatterjee, Sayak & Gope, Somen & Dhani, S. & Hegde, Aheesh & Chatterjee, M. & Das, Supriya & Biswas, Saikat. (2024).

HONOURS AND AWARDS

[07/2019] **INSPIRE Fellowship Awarding institution:** Dept. of Science and Technology

HOBBIES AND INTERESTS

Yoga practitioner

- President, Yoga Club NISER (2022-2023)

Badminton

- Intra-NISER tournament winner team - 2023

Chess

- Participant at district level tournaments

Volleyball

- IISM-2019, Semifinalist

Poetry and Writing

- In Kannada and English languages. Glimpses are on Instagram,

Link: https://www.instagram.com/ento_ondu

LANGUAGE SKILLS

Mother tongue(s): Kannada

Other language(s):

English

LISTENING C2 **READING** C2 **WRITING** C2

SPOKEN PRODUCTION C2 **SPOKEN INTERACTION** C2

Hindi

LISTENING C2 **READING** C2 **WRITING** C1

SPOKEN PRODUCTION C2 **SPOKEN INTERACTION** C2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user