Attending the May 1-5 HSF-I

Kajari Mazumdar

Department of High Energy Physics, TIFR

Senior Professor

Leader of the TIFR-CMS group

Site-Executive, CMS Tier2 Centre at TIFR

Former Country-Coordinator, India-CMS Collaboration

Have been working in CMS for a long time.

But cannot handle the software any more!

Hence I want the students to be abreast with the latest and greatest software tools.

tifr

David Lange

Princeton University
Staff scientist

My research:

CMS experiment
IRIS-HEP
Interactive computing

My expertise is: HEP application integration/deployment; Performance debugging

What keeps me up at night? Understanding how exciting R&D results transition to deployment

I want to know more about: Ideas and techniques for enabling more science at HL-LHC.

PRINCETON UNIVERSITY

iris hep

Brij Kishor Jashal

Scientific Officer
Department of High Energy Physics
Tata Institute of Fundamental Research

My research:

High Energy Physics Computing
Research Software
CMS experiment
LHCb experiment

My expertise is: Research software and computing

A software and computing problem I'm grappling with: R&D Computing infrastructure, software and services

I want to know more about:
Literally Everything

tifr

Jim Pivarski

Research Scientist at Princeton

My research: Growing the Pythonic HEP ecosystem, particularly as lead developer of Uproot and Awkward Array

My expertise is: Python, vertical scaling, array-oriented programming

A software and computing problem I'm grappling with: involving more people in scientific Python, both as users and developers, bridging Awkward Array with everything, including ROOT and RDataFrame, generalizing its applicability beyond HEP

I've got my eyes on: Julia, portable GPU programming, Arrow, Parquet, Zarr

I want to know more about: what everyone else is working on/thinking about… the direction of HEP analysis software today

PRINCETON UNIVERSITY

CMS Compact Muon Solenoid

iris hep
Institute for Research & Innovation in Software for High Energy Physics

Kuldeep Kumar Pal

Working in CMS experiment since two year

Done a projection study for HL-LHC during master's project

Knows introductory ROOT, python and C++

Highly interested in software for HEP

School of Physical Sciences, NISER

Ph.D. Student

Works with Dr. Prolay Kumar Mal

In CMS Experiment

Vishal Vilas Shinde

Currently in junior year pursuing Bachelors in Computer Science and Engineering from University Of Mumbai.

Have worked on developing PWA's and now transitioning/exploring the field of research.

Familiar with Java, Typescript, Python, C++

Won 2022 Shubhra Kar Linux Foundation Training(LiFT) Scholarship

Recently worked on developing an AI using Genetic algorithm to play Wumpus world game and now improving it using NEAT algorithm.

Kalpna

- Ph. D. scholar at University of Delhi, Delhi
- Working under Prof. Ashutosh Bhardwaj

Indian Institute of Technology Bombay

Sayan Dhani

Master's Student

Department of Physics , IIT Bombay

Mail : 22n0324@iitb.ac.in

Doing Master Project under Prof. Sadhana Dash

Interest : Experimental Nuclear & High Energy Particle Physics(Phenomenology and Experimental)(Interested in topics like Quark-Gluon Plasma, Charge-Parity Violation, Matter-Antimatter asymmetry); Electronics & Programming Enthusiastic(Python, C++,C) ;

Siddhant Hajare

University department of physics,

University of Mumbai

2nd Year Master’s Student

Currently working on experimental nuclear physics for my master’s thesis

I was introduced to the field of particle physics through my master’s course which got me interested in exploring it more

At the footsteps of getting in to the world of scientific research

SUSHILA LOHAN

Research Scholar

Delhi University

Working on CMS software and Gem Detectors

Krishnasri VVH Gollakota

Inspired by the work of Emmy Noether, I have fascination for the study of symmetries, drawing my interest in the field of High Energy Particle Physics.

Worked on Two-component Formalism of Supersymmetry (Masters Project)

I would like to pursue research in the field of High Energy Particle Physics.

Post-graduate Student (Masters in Physics)

University of Mumbai

Balaram Singh

Master’s Student

Department of Physics,IIT Bombay

Mail:-22n0305@iitb.ac.in

Doing Master’s project under Prof. Sadhana Dash

Interest :-Experimental High Energy Physics.

Programming Language-Python, C++

Rahul Verma

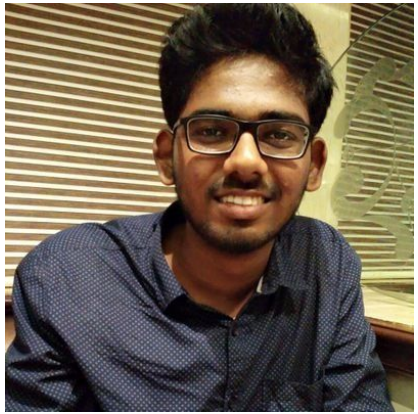
Research Scholar

Department of Physics IIT Bombay

ALICE Collaboration(CERN)

Mail : 22d1058@iitb.ac.in

Working under Dr. Sadhana Dash and Dr. Basanta Kumar Nandi , IIT Bombay



Durgesh Gaikwad

Post Graduate Student at

Department of Physics

UNIVERSITY OF MUMBAI

- Worked on Spontaneous Symmetry Breaking during master's thesis.
- Interested in Higgs Physics

Shaikh Khatiza Banu

Post-Doctoral Fellow at IIT Bombay

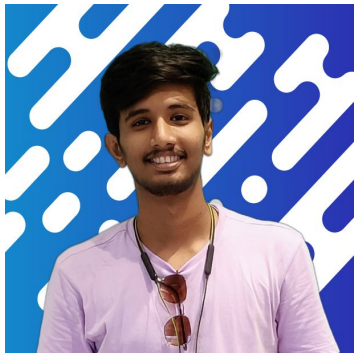
Department of Physics

email: ***khatizabanu202@gmail.com***

Research Interest

I have been working in the area of theoretical high energy physics particularly in perturbative QCD. In our research we study the tomography of nucleons through the distribution function such as Parton distribution functions (PDFs) and transverse momentum dependant PDFs. We use fortran programming to perform the numerical integration.

Jayesh V. Hire



- Learning Quantum Computing from past 2 years.
- Have experience in various SDK's like QISKIT, CIRQ.
- Currently a project intern at QuantumAI.
- Interested in Machine Learning & in scientific programming.
- Let's connect :)

https://www.linkedin.com/in/jayeshhire456

University Department of Physics,

Mumbai University,

Master's Student.

Currently working on data classification techniques using QML.

Sanu Varghese

- Ph.D Student from Institute of Physics Bhubaneswar
- Joined CMS in 2020
- Physics Analysis: Charged Higgs search in H+ --> cs channel
- Involved in High Level Trigger Studies at CMS (Level 2 convenor in TSG-STEAM)
- CMS Award - 2022 (Trigger Coordination)
- sanu.varghese@cern.ch

TANU GAHLAUT

Research scholar,

ALICE Collaboration

Exp. High Energy Physics

Department of Physics

IIT Bombay

Supervisor: Prof. Sadhana Dash

Mail id : 22d1056@iitb.ac.in

tanu.gahlaut@cern.ch

SOUMYA MUKHERJEE

→ PhD student at TIFR, Department of High Energy Physics

Thesis supervisor : Prof. Kajari Mazumdar

→ Working in CMS collaboration (High energy Physics) in Higgs related physics analysis

→ Thesis submitted for examination

→ Will join University of California San Diego (UCSD) soon as a postdoc fellow.

→ email: soumya.mukherjee@tifr.res.in

soumya.mukherjee@cern.ch

→ Mob: +91 9123976892

Pruthvi Suryadevara

→ PhD student at TIFR, Department of High Energy Physics

Thesis supervisor : Prof. Shashi Duggad

→ Working in CMS collaboration (High energy Physics)

→ In third year of my PHD

Working on HGCAL Simulation Geometry description in CMSSW, Study CNN based Object detection for particle reconstruction, Lepton Flavour Universality

→ email: pruthvi.suryadevara@tifr.res.in

→ Mob: +91 7732035599

Saikat Karmakar

- TIFR Mumbai: Graduated in last February
- PhD Supervisor: Monoranjan Guchait
- Thesis Topics:
  - Search for top squark (super-partner of top quark) pair production in di-tau final state
  - Search for Higgs boson in association with top and anti-top pair in di-tau final state

Email: saikat.karmakar@cern.ch

Mob: 9987152399

- Physics analysis using CMS data
- Machine learning
- Hardware

Dipak Maity

- Ph.D student from Institute of Physics Bhubaneswar
- Works in CMS Collaboration under the supervision of Dr. Aruna Kumar Nayak
- Physics Analysis: Bs to Tau Tau(semi leptonic decay)
- Involved in Tau DQM Validation, Tau Data Certification, HLT Rate Studies
- Familiar with C++, Python, ROOT, ML(BDT, DNN, etc.)
- dipak.maity@cern.ch

SAMSUZZAMAN AFROZ

- Research Scholar
- Department of Astronomy and Astrophysics
- TIFR,Mumbai

Pritesh Srivastava

Research Scholar
DCMP&MS, TIFR

Interested in:
Applications of Machine Learning in different areas of Condensed Matter Physics

Contact me at:
pritesh.srivastava@tifr.res.in

Amol Pawar

- I am a PhD student at Indian Institute of Technology, Bombay working with Prof. Asmita Mukherjee.
- I work in high energy physics phenomenology related to electron and ion collider
- My interest is in gluons contribution to the structure of proton

My contact num: +91 8080808588
My email: 194120018@iitb.ac.in

Himanshu Mishra

Pursuing M.Sc. Physics from University of Mumbai

- Working on my M.Sc. project - “Spin structure of Proton”

Shounak Das

B.E CSE 2nd Year
Jadavpur University

Interested in High Performance Computing

Faraz Mehdi

Department of Physics, IIT Bombay

Junior Research Fellow

Interested in Perturbative QCD

Have been learning various approaches to do precision calculations including the local unitarity and the differential equation approach.

Previously worked on the study of synchronization blockade in open quantum systems

Ravi Singh

Junior Research Fellow
Dept. of Physics, IIT-B

I am currently working on decomposition of proton spin theoretically and phenomenologically.

I am interested in understanding how the quantities that are used to understand these decompositions like GPDs, TMDs, etc. are going to be probed at Electron Ion Collider.

I am also doing a course on machine learning and deep learning.

Aniruddha Chakraborty

Research scholar at Tata Institute of Fundamental Research

Working with Prof. Suvodip Mukherjee on gravitational lensing of gravitational waves for my first departmental project in IPhD 2nd year.

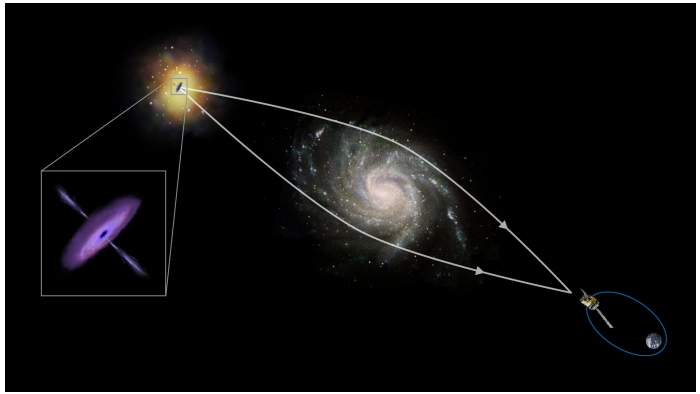


Image credit: ESA

Harsh Mehta

From Tata Institute of Fundamental Research

PhD Research Scholar

Working with Prof. Suvodip Mukherjee on developing a multi-band framework for search of axions for my first departmental project in PhD 1st year.

Samadhan Kamble

PhD Scholar from the Experimental High Energy Physics (EHEP) Group!

@Dept. Of Physics, IIT Madras, Chennai

CMS experiment at LHC, CERN

samadhan.kamble@cern.ch

Research:

Heavy-flavor Physics

@CMS experiment

L3 convenor and a MC simulation request manager for the PdmV group of the CMS collaboration

Jan 2023 - onwards

Geo Jolly

- UG 3rd year Computer Science Student
- Geometric Deep Learning and Reinforcement learning
- Currently working on gnn_tracking (Charged particle tracking with graph neural networks)
- Interested in the applications of machine learning in physics.

Rahul Shaw

- Research Scholar

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- Depeartment of High Energy Physics

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Mohammad Mobassir Ameen

PhD Student

Department of physics

Indian Institute of Technology Madras, Chennai

TN - 600036, India

Email: mohammad.mobassir.ameen@cern.ch

Working in CMS Collaboration

Working analysis: HIGGS Group - inclusive/diff measurement of **ttH and tH production to multilepton**

Worked as a L3 position of validation manager in PdmV group

Currently working as a MC contact person in ttH subgroup of HIG Group

Prachurjya Pran Hazarika

Research Scholar

IISER Pune

Member of CMS collaboration since 2021

Recently selected as an MC contact person for EGamma

Please call me Prachu :)

Riya Sharma

Research Scholar at IISER, Pune.

Joined the CMS collaboration in 2022.

SAURAV SEN

- Research Scholar
- Department of Astronomy and Astrophysics
- TIFR,Mumbai

- Research interest: High mass star formation.

Sanjeev Kumar

Department of High Energy Physics, TIFR

Research Scholar at DHEP, TIFR

Teaching at University of Rajasthan

Have been working in CMS for a long time.

Interested in learning new languages and new softwares. Have teaching experience of c/c++ programming and shell programming for couple of years.

Chandra Prakash

- **Ph. D. scholar at University of Delhi, Delhi**
- **Working with Prof. Md. Naimuddin**
- **Working in CMS collaboration**
- **Email: chandradhawaniya@gmail.com**

Tarun Kumar

Email : tarun.kumar@cern.ch

- Research scholar at Department of Physics and Astrophysics, University of Delhi.
- Working with Prof. Ashutosh Bhardwaj and Prof. Kirti Ranjan.
- Working in CMS Collaboration on CMS Outer Tracker Phase 2 upgrade of HL-LHC.

Gursharan Singh

Integrated-PhD student at TIFR mumbai from High energy physics Department.

Will use ML/ Deep learning for wave shaping or other classifier's where wave like phenomena have been used.

Also interested in learning about AGI and human brain.

Connect with me: https://www.linkedin.com/in/gursharan-singh-8393291a0/