Department of Physics, IIT Hyderabad presents

भारतीय प्रौद्योगिकी संस्थान हैदराबाद
Indian Institute of Technology Hyderabad

SERB INDIA

An International Conference

PHOENIX 2023

18-20 December

phoeniX

Thrust Areas

Beyond the Standard Model
Present and Future Colliders
Astroparticle Physics and Cosmology
Neutrino physics
Dark Matter

Venue

Convention Center
IIT Hyderabad
Kandi, Telangana, India

Contact

phoenix@phy.iith.ac.in
Phone: +91 040 2301 6023

Looking back through history

Anomalies 2019 : 18-20 July (Pre-COVID era)

An Indo-US joint workshop.

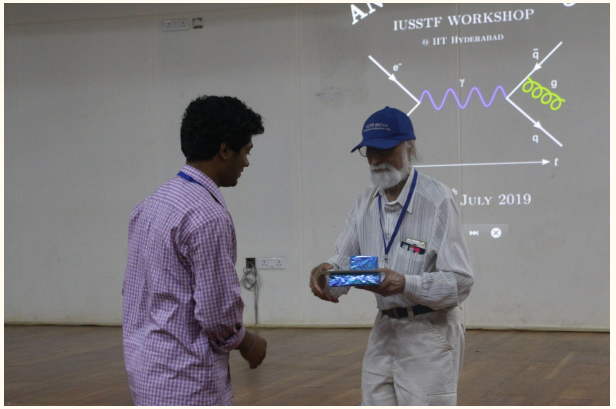
Funded by IUSSTF, SERB, IMSc (DAE).

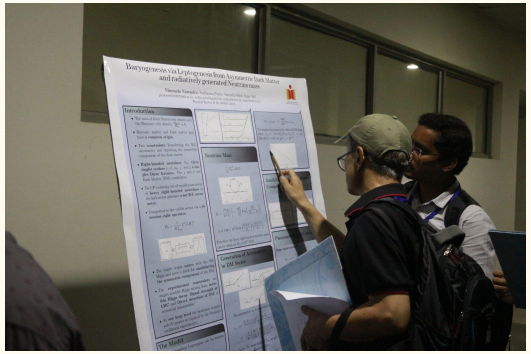
First iteration: Offline @ IITH

Total participants: 130

Total speakers: 60

Anomalies 2019: Gallery





No Marriott this time, not enough funding :(

Anomalies 2020: 11-13 September (The COVID era)

Organized online due to COVID.

Total participants: 128

Total speakers: 54

18 international speakers including

Prof. Eung Jin Chun
Prof. Katri Huitu
Prof. Mark Hindmarsh
Prof. Julia Gehrlein
Et al.

Anomalies 2021: 10-12 November (COVID again)

Online once again.

Total participants: 153

Total speakers: 78

Contents

Gravitational wave like signature and finite temperature field theory

Hadronic & leptonic colliders

Flavour Physics & muon g-2

Dark matter & Neutrino Physics

Anomalies 2021: Core team and control room (B-506)

DML@LHC-2022: a change of pace

No Anomalies in 2022.

Data and Machine Learning at the Large Hadron Collider (DML@LHC): specialized workshop organized from 22-28 August 2022.

Organized under the Karyashala programme of SERB.

Instructors:
Aruna K. Nayak
Nishita Desai
Priyotosh Bandyopadhyay
Saranya Samik Ghosh
Satyaki Bhattacharya

Rebirth as Phoenix 2023

Phoenix 2023

Back to offline again.

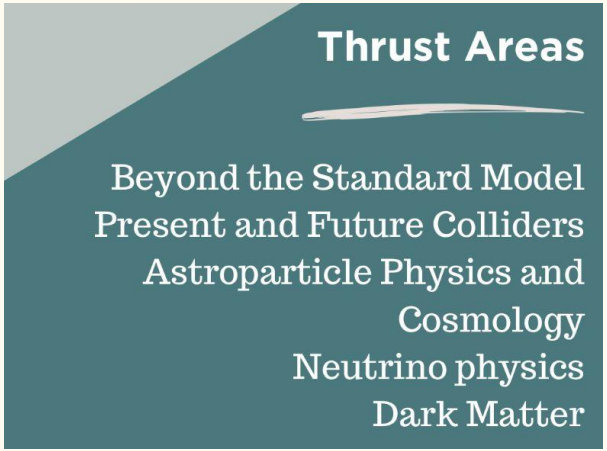
Partially supported by SERB.

In the era of LHC run 3 and the newer proposed colliders, anomalies are slowly going away.

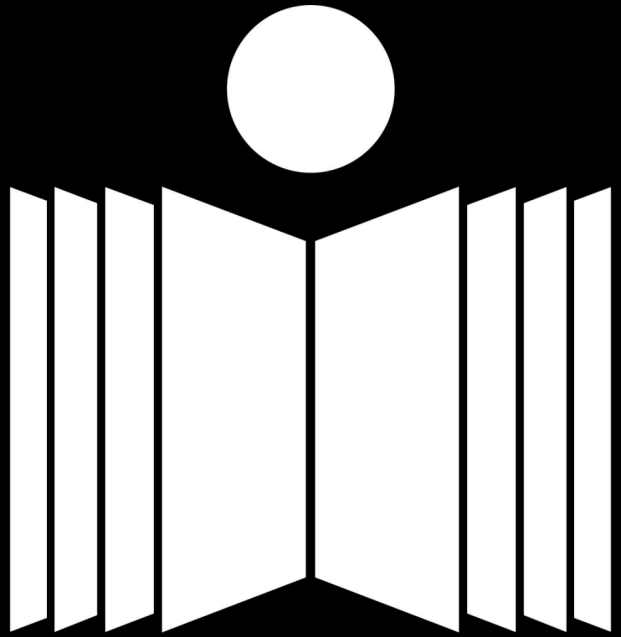
PHOENIX: encompasses the phenomenology of Dark Matter, Neutrinos, various extensions and interactions, at different energy frontiers, with the help of present and future colliders.

Speakers include:

Eung Jin Chun
Mariana Frank
Rohini Godbole
Shrihari Gopalakrishna
Kajari Mazumdar
Et al.



IITH, at a glance



భారతీయ సాంకేతిక విజ్ఞాన సంస్థ హైదరాబాద్

भारतीय प्रौद्योगिकी संस्थान हैदराबाद

Indian Institute of Technology Hyderabad

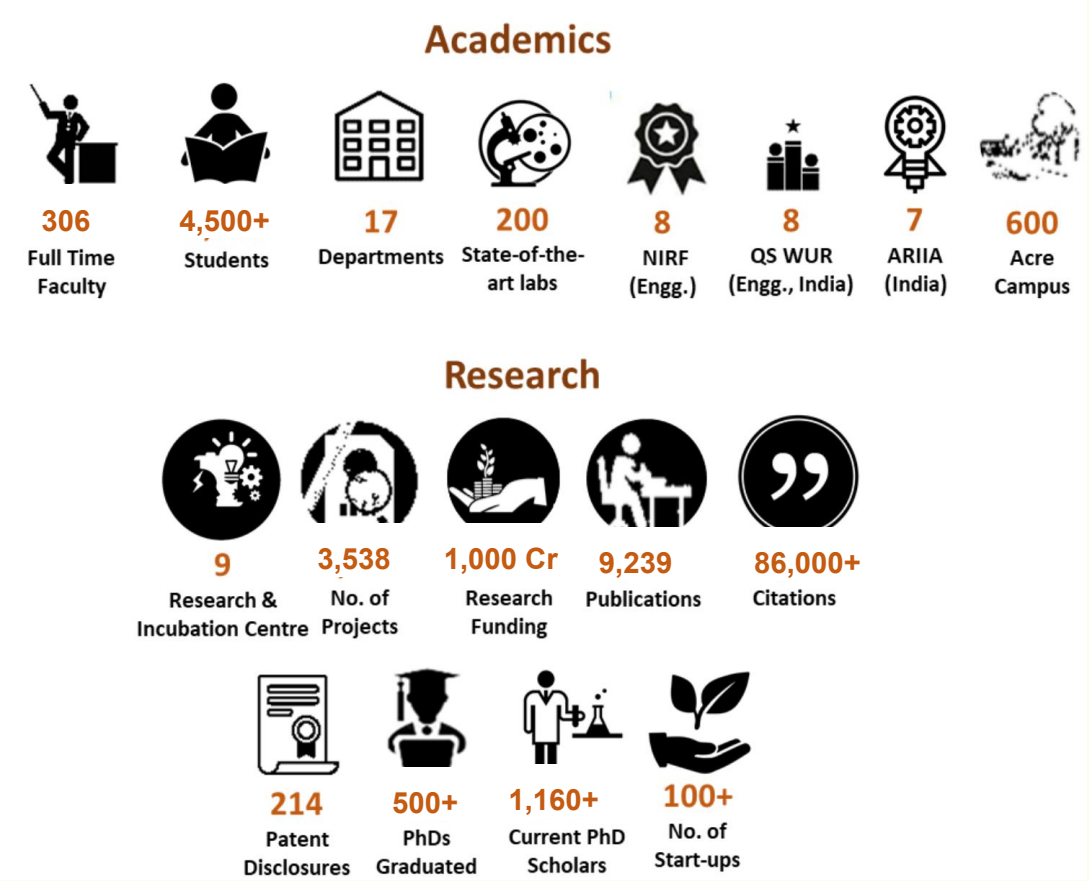
Indian Institute of Technology Hyderabad (IITH)

Indian Institute of Technology Hyderabad (IITH) was founded in 2008 and moved to the current campus in 2015.

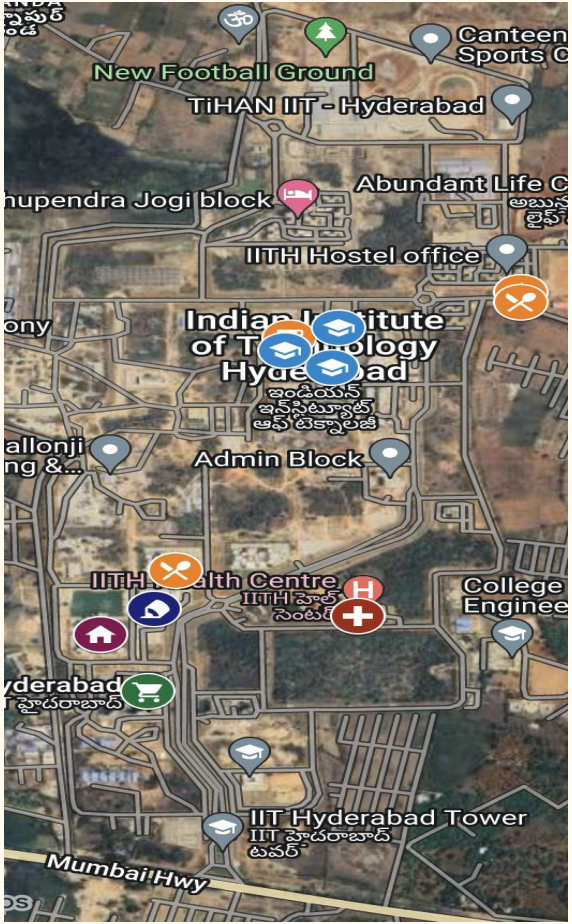
IITH has established itself as one of the premier institutes for science and engineering in India.

IITH has a strong focus on encouraging research and innovation.

IITH motto: *"Inventing and Innovating in Technology for Humanity"*



Indian Institute of Technology Hyderabad



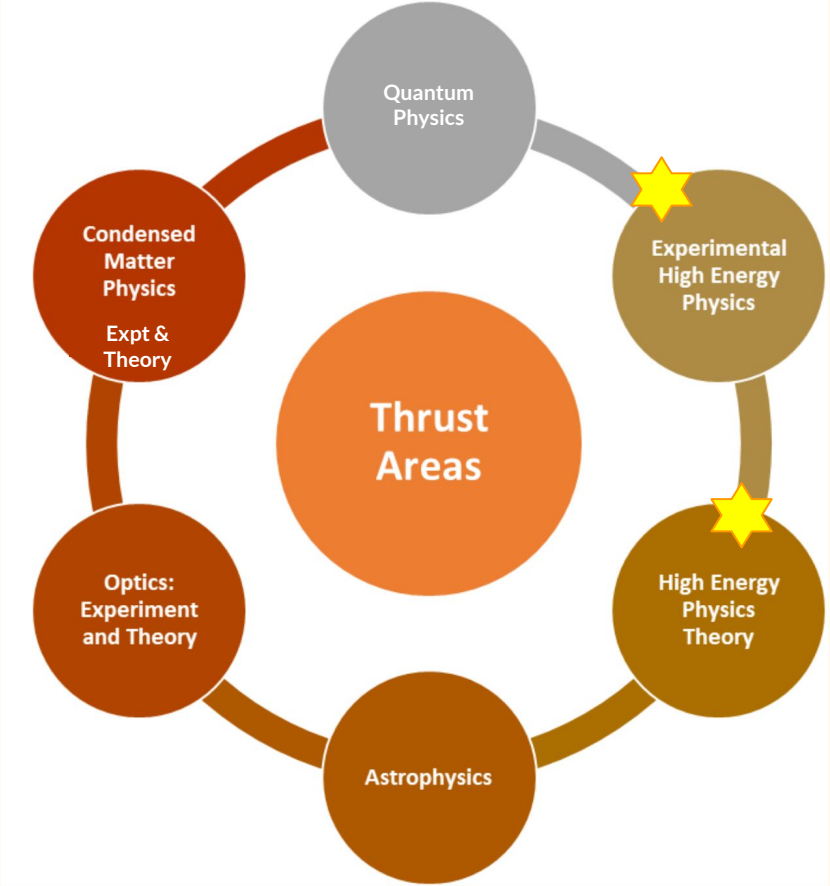
Department of Physics, IITH

29 faculty members working in the fields of:

high energy physics (experiment & theory),
astrophysics,
condensed matter physics (exp. & theory),
optics,
and quantum information.

Department has ~250 students including those pursuing B.Tech. in Engineering Physics, M.Sc. in Physics and Ph.D.

Department also conducts M.Sc. in Medical Physics and M.Tech. in Quantum & Solid State Devices.



Department of Physics, IITH

HEP @ Department of Physics, IITH

HEP Faculty Theory/Pheno

Anjan Kumar Giri
Professor
Ph.D: Utkal University
- Flavor Physics and CP violation
- Neutrino Physics
- BSM

Narendra Sahu
Professor
Ph.D: IIT Bombay
- Physics (Elementary Particle) phenomenology

Anurag Tripathi
Associate Professor
Ph.D: Harish-Chandra Research Institute
- High Energy Physics
- Perturbative Quantum Chromodynamics
- Infrared Structure of Gauge Field Theories

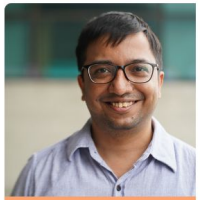
Priyotosh Bandyopadhyay
Associate Professor
Ph.D: Harish Chandra Research Institute, Allahabad (Homi Bhabha National Institute)
- LHC
- Higgs Physics
- Supersymmetry

Raghavendra Srikanth Hundi
Assistant Professor
Ph.D: Harish-Chandra Research Institute
- Physics beyond standard model
- Neutrino masses

Shubho Ranjan Roy
Assistant Professor
Ph.D: Brown University
- Nonperturbative String and Quantum Field theory
- AdS/CFT
- Quantum Black Holes

HEP Faculty Experiment

Saranya Ghosh
Assistant Professor



Saurabh Sandilya
Assistant Professor

Adjunct Faculty members

Eric Laenen
Adjunct Professor

Eung Jin Chun
Adjunct Professor

Karim Trabelsi
Adjunct Professor

Mariana Frank
Adjunct Professor

Distinguished faculty

Prof. Rohini M. Godbole
IISc, Bangalore
Distinguished Professor

Department of Physics, IITH : Collaborations

Belle and Belle II Collaborations

CMS Collaboration at CERN (in process)

DUNE Experiment

NOvA Experiment

Also for Astrophysics:

Dark Energy Survey Collaboration

Indian Pulsar Timing Array Consortium

Phoenix 2023

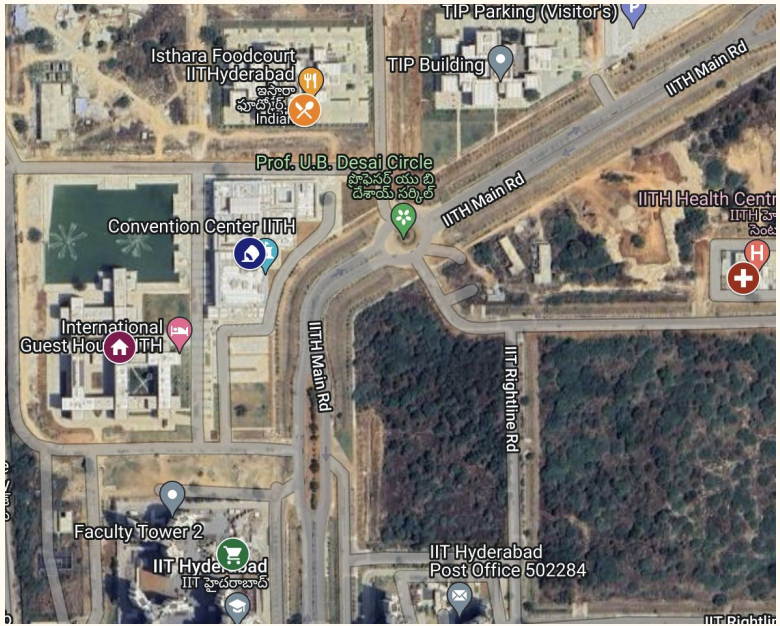
Venue for conference:

Convention Center (CC)
Plenary : CC2 at Conv. Center
Parallel: CC2, CC3

Stay:

All non-local participants are hosted at the International Guest House (IGH)

Medical Center, Supermarket (Sampoorna), ATM (SBI) within walking distance.



Food

During 18-20 December:
three lunches,
two regular dinners,
one Conference dinner
will be provided at the Upper Dining Hall, IGH.

Complimentary breakfast will be provided at the lower/upper dining hall, IGH for those staying.

Tea/Coffee and Snacks will be served at the Convention Center.

There is an Isthara Food Court within walking distance of the Convention Center with outlets such as Subway etc.

WiFi

At the Convention Center, for internet access:

Participants from IITH can use their regular IITH Wifi credentials.

Non-IITH participants can use:

SSID: IITH-Guest-PWD-IITH@2023

Password: IITH@2023

Eduroam Wifi is also available.

At IGH, please contact the reception for WiFi details.

Hope you enjoy the conference!