

Department of Physics, SoT, PDEU (formerly, PDPU), Gandhinagar & Kshama Ahmedabad Academy of Sciences (KAAS) Organize

Summer School in Theoretical Physics

(June 13 – 24, 2022)

Theoretical Physics has been an attractive area for the students, educators as well as the researchers across the globe. The attraction lies in its capability to most precisely predict and successfully explain the natural phenomena; terrestrial and extra-terrestrial. In addition, the area is also rich mathematically, conceptually and philosophically. Quantum Gravity, Black Holes and Other Exotic Objects in Space, Relativity, String Theory, Mathematical Modeling and Simulations of Complex Systems are a few among the many areas to mention. India, as a nation, is well placed to cater the interests of students in Theoretical Physics with numerous opportunities spread across the institutions.

The aim of the school is to introduce students to the key concepts, useful learning resources, current research, and various opportunities available in India and abroad. The school also serve an opportunity to connect the students with the academicians from various institutes.

Who can attend : 3rd year Bsc (Physics, Mathematics), 3rd BTech (All Branches) and 1st and 2nd year MSc (Physics) students. However, any other Physics enthusiasts are also welcome to participate.

Date : **June 13 – 24, 2022**

Mode of Participation : Hybrid mode (Offline as well as Online)

Maximum Participants : 40

Registrations Window : April 16 – May 27, 2022

Registration Fee : **Rs 3000.00**

Certification of Participation : Yes, to be given by PDEU

Sessions to be recorded : Yes, but subject to the instructor's' consent

Registration Link : <https://forms.gle/JLyUxHGAwBoQq9D28>

Accommodation : Available to a limited number of participants on payments. Make a request at gurudatt.gaur@kaas.co.in. However, all the participants are strongly encouraged to their own arrangements for the accommodation.

Courses : Classical Physics; Quantum Physics; Mathematical and Statistical Methods with Python; Introduction to Astronomy and Astrophysics; Nonlinear Dynamics; Theoretical Condensed Matter Physics; Classical and Quantum Field Theory; Einstein's Relativity

Instructors



Dr Jane Alam

Senior Professor & Head, Physics
Group, VECC, Kolkata

Dr Amit Reza

Post Doctoral Fellow, Nikhef,
Netherlands

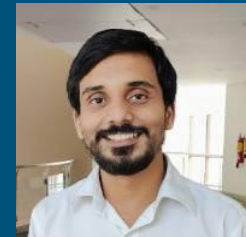


Dr Vikrant Saxena

Assistant Professor, Department of
Physics, IIT Delhi

Dr Sachin Pandey

Assistant Professor, IAR,
Gandhinagar



Dr Jaita Banerjee

Physics Head, KAAS, Ahmedabad

Dr Gurudatt Gaur

Founder, KAAS, Ahmedabad



Schedule

Session	Date	Time
Inaugural Session	June 13, 2022	10:00 am – 10:30 am
Week - I (June 13 - 17)	Time (Monday - Friday)	Subject
	10:30 am - 11:30 am	Classical Physics
	12:00 noon - 01:00 am	Quantum Physics
	02:00 noon - 03:00 pm	Mathematical & Statistical Methods with Python
	03:30 pm - 04:30 pm	Introduction to Astronomy & Astrophysics
Week - II (June 20 - 24)	10:30 am - 11:30 am	Nonlinear Dynamics
	10:30 am - 11:30 am	Theoretical Condensed Matter Physics
	12:00 noon - 01:00 pm	Classical & Quantum Field Theory
	02:00 pm - 03:00 pm	Einstein's Relativity

Payment Instructions:

1. Go to the link: <https://onlinepayment.pdpu.ac.in/conferences/>.
2. Select 'Two Week Summer School on Theoretical Physics.'
3. Fill all the other details. Select 'Registration Fee' in the Category drop down.
4. Press the button 'Pay' to make the payments.
5. Share the transaction number at gurudatt.gaur@kaas.co.in.

Organized by: [Department of Physics](#), School of Technology, Pandit Deendayal Energy University (formerly, PDPU), Gandhinagar & [Kshama Ahmedabad Academy of Sciences](#), Ahmedabad.

Patrons: Prof. S. Sundar Manoharan (Director General, PDEU), Prof. Sunil Khanna (Director, SoT, PDEU)

Conveners: Dr Satyam Shinde (HoD, Physics, SoT, PDEU), Dr Rohit Srivastava (Associate Professor, Physics, SoT, PDEU), Dr Gurudatt Gaur (PDEU, Gandhinagar and KAAS, Ahmedabad).

Contacts: gurudatt.gaur@kaas.co.in, rohit.srivastava@sls.pdpu.ac.in, satyam.shinde@sot.pdpu.ac.in.