

KURUKSHETRA

Kurukshetra is popularly known for its historical and religious importance. Here, the battle of Mahabharata was fought, and Lord Shree Krishna delivered the divine message as enshrined in the holy book "Shrimad Bhagwad Gita". It is also known as DHARAMKSHETRA. The famous tourist spots are Brahmavar, Jyotisar, Dharohar, Shek Chehli's Tomb, Panorma, Sannihit Sarovar, Kalpana chawala Planitarium, etc. In addition to its spiritual significance, the town has steadily developed into a centre of academic excellence. Kurukshetra is very well connected by Rail, Delhi- Ambala section, Road (NH1, connecting Delhi-Chandigarh-Amritsar-Jammu) and Air (Delhi 160 km and Chandigarh 80km). The NIT Kurukshetra campus is situated about 10 km from Pipli, Bus stand located on NH1 and about 4 km from Kurukshetra railway station.

NATIONAL INSTITUTE OF TECHNOLOGY KURUKSHETRA

NIT Kurukshetra, formerly Regional Engineering College Kurukshetra, was founded in 1963. It was conferred upon the NIT status, with Deemed University on June 26, 2002. The Institute offers courses in various disciplines of B.Tech., M.Tech., MBA, MCA and Ph.D. with an annual intake of about 1500 students. Institute also provides excellent facilities for advanced research in the emerging areas of Engineering, Science, and Technology. The institute has well-qualified and dedicated faculty, supporting staff, laboratories and other infrastructure. The infrastructure is geared to enable the institute to produce technical personnel of high quality.

Department of Physics

The Department of Physics at NIT Kurukshetra is committed to excellence in teaching and research, with active research programs spanning High Energy Physics, Nanotechnology, Condensed Matter Physics, and related interdisciplinary areas. The department aims to provide a strong academic environment that promotes innovation, advanced research, and collaboration. Organizing the Short-Term Course on *Frontiers in High Energy Physics* aligns with the department's vision of exposing students and researchers to contemporary developments and emerging research directions in particle physics and its applications. The department is equally active in research with many quality publications each year in reputed Journals.

PATRON

Prof. Brahmjit Singh
Director, NIT Kurukshetra

Co-PATRON

Prof. Mayank Dave
Dean (FW)

Chairperson

Prof. Neena Jaggi
HOD, Dept. of Physics

CONVENER(S)

Prof. Ashavani Kumar
Prof. R. P. Chauhan
Professor, Dept. of Physics

COURSE COORDINATOR(S)

Dr. Tanmay Maji
Dr. Imtiaz Noor Bhatti
Assistant Prof., Dept. of Physics

MEMBERS

All faculty of Physics
Department

IMPORTANT DATES

- Last date for submission of filled
Registration Form: **November 15, 2026.**

Address for Correspondence:

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Phone: 01744-233-498, 494



Short-Term Course (Offline) on

Frontiers in High Energy Physics
(STC-FHEP26)
(November 21-25, 2026)



Organized by

Department of Physics
National Institute of Technology
Kurukshetra 136119, Haryana, India

OBJECTIVE OF FHPEP

The primary objective of the FHPEP is to provide participants with a strong foundation in modern High Energy Physics by introducing cutting-edge topics like the Standard Model, Light-Front QCD and Quark-Gluon Plasma. MSc and PhD students often lack exposure to advanced theoretical frameworks beyond their coursework. The course aims to bridge the gap between classroom learning and frontier research while fostering analytical and research skills. By the end of the course, participants will:

- Gain a strong understanding of key concepts in modern High Energy Physics.
- Learn the theoretical foundations underlying strong and electroweak interactions.
- Understand the principles of current HEP experiments and data analysis techniques.
- Explore the role of Machine Learning in Particle Physics Research.
- Build collaborations with experts and peers, fostering future research opportunities.

FHPEP CONTENTS

The following topics will be covered during the training program

- Quark-Gluon Plasma (QGP) in Heavy Ion Collision
- Entanglement in Deep Inelastic Scattering (DIS)
- Light-Front Quantum Chromodynamics
- Standard Model of Particle Physics
- Machine Learning in High Energy Physics
- High Energy Physics experiments

RESOURCE PERSONS

The resource persons will be from premier Institutions of India like IITs, NITs, and experts from Industries/ Govt. organizations.

WHO CAN ATTEND?

Faculty members/ research scholars/ pursuing MSc. in Physics students from academic institutes approved by the AICTE/ UGC/ MHRD and Scientists/ Engineers working in Private/ Public/ Govt. organizations/ industries etc. can attend the course. However, MSc Students and research scholars engaged in Ph.D. will be greatly benefited. The application should be made on the registration form and should accompany the registration fee as mentioned below:

Participant's category	Registration fee*
Students/Scholars (NITk)	500/-
Students/Scholars(Other)	1000/-
PDF/Faculty members	3000/-
Industry/ R&D/ Govt. Org. professionals	5000/-

*** Registration fee is non-refundable.**

Registration fee includes course with certificate.

The Registration fee is to be paid through SBI Collect.
Go to SBI collect – Select Education Institutions – Select State as Haryana – Director National Institute of Technology Kurukshetra – Select **STC-FHPEP26** as payment category – follow the steps – Make the payment and collect the receipt.

The brochure with the registration form can be downloaded from the Institute website www.nitkkr.ac.in and <https://sites.google.com/view/stcfhpep26nitk/home>

How to Apply

Interested candidates can apply online by clicking the link: <https://forms.gle/aj2MQtJeoFzV7Wz49>

Participant details need to be filled and payment details be uploaded by using the above link in Google Forms on or before November 15, 2026.

Registration Deadline: November 15, 2026

Note: The participants need to upload proof of payment (a receipt of SBI collect payment) through above g-form link.

REGISTRATION FORM Short-Term Course on

Frontiers in High Energy Physics (STC-FHPEP26)

November 21-25, 2026

Title: (Dr./Mr./Mrs./Ms.) :

Name (in BLOCK LETTER) :

Highest/ Qualifying Degree:

Gender (M/F) :

Current Designation :

Affiliation :

**Address for
correspondence:**

Phone :

E-mail :

**Category (Please Tick) : Students/ Faculty/ Industry/R&D
/ Govt. Organization**

Payment Details

**Transaction ID/
Reference ID:**

Date of Payment:

Amount :

Attachment(s)

**Fee Payment
Receipt**

Signature of applicant (with date):

Offline submission of the registration form is not acceptable; participants are advised to apply through g-form.

REGISTRATION FORM

Short-Term Course

on

Frontiers in High Energy Physics (STC-FHEP26)

(November 21-25, 2026)

Name (in BLOCK LETTER) :

Highest/ Qualifying Degree:

Gender (M/F) :

Current Designation :

Affiliation :

Address for correspondence :

Phone :

E-mail :

Category (Please Tick) : Students/ Faculty/ Industry/ R&D / Govt. Organization

Payment Details

Transaction ID/

Reference ID:

Date of Payment:

Amount :

Attachment

Fee Payment Receipt

Signature of applicant (with date):

The candidates need to fill the online google form given at the link

<https://forms.gle/aj2MQtJeoFzV7Wz49>

Submit a duly filled copy of this registration form at the registration desk by 22 Nov. 2026.

Note: The participants need to upload Proof of payment (a receipt of SBI collect payment).