

TATA INSTITUTE OF FUNDAMENTAL RESEARCH

ICTS SUMMER COURSE

LIGHT AND BEYOND

This short and intensive advanced undergraduate level course starts with understanding of light as an electromagnetic wave. Optical phenomena in nature and technology, and the underlying concepts are explored using mathematical ideas and tools, experimental demonstrations, and computer simulations. Problem solving and discussion sessions are interwoven with the lectures. The physical ideas and mathematical models lead to least action and phase space in classical physics, and wave functions in quantum physics.

PREREQUISITES

Complex numbers, matrices, calculus. Experience with a programming language is desirable.

REGISTRATION

For attending the course, please register online at https://bit.ly/sc-2020-light-register

June 1–July 1, 2020 MON & WED 9:30–10:30 LECTURE

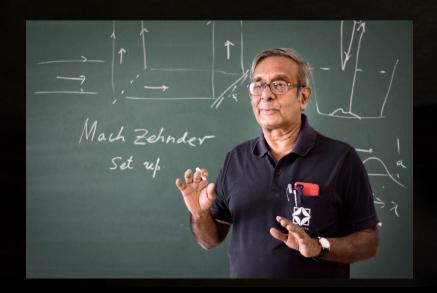
11:00-12:30 TUTORIALS / DISCUSSIONS

Deadline for application 31 March 2020

This summer course is meant for undergraduate and masters students in science and engineering. No accommodation or travel support will be provided. ICTS will arrange a shuttle from IISc to ICTS for selected participants.

icts.res.in/lectures/sc-2020-light

Emmy Noether Hall, ICTS



Rajaram Nityananda

Azim Premji University, Bengaluru

