



# Surya Tilak Project at Ayodhya

## Why in News?

[Indian Institute of Astrophysics \(IIA\)](#), an Autonomous body under the Department of science and Technology played a crucial role in the **Surya Tilak Project at Ayodhya**.

## Key Points

- Under the Surya Tilak project, **sunlight was brought on the forehead of Sri Ram Lalla at 12 noon** on the occasion of [Sri Ram Navami](#) in the Chaitra month.
- IIA team carried out the **calculation of the sun position, design and optimisation of the optical system**, and performed the integration & alignment at the site.
  - The IIA team led the calculation for identification of the calendar days of Sri Ram Navami for **one cycle of 19 years** followed by its repetition, estimation of the position in the sky on the calendar dates of the Ram Navami.
  - They also led the design of an **opto-mechanical system** to bring the sunlight from the top of the temple to the forehead of the idol, **estimation of the size, shape and location of mirrors and lenses** in the system for sufficient light to fall on the idol for about 6 minutes.
- The **device has been manufactured by Optica, Bangalore & implementation** of the opto-mechanical system at the site is being done by [CSIR-CBRI \(Council of Scientific and Industrial Research-Central Building Research Institute\)](#).

## Indian Institute of Astrophysics (IIA)

- The IIA is a premier research institute in India dedicated to the study of astronomy, astrophysics, and related fields. Wholly financed by the **Department of Science and Technology, Government of India**.
- It has several **observational facilities**, including the **Vainu Bappu Observatory** in Kavalur, Tamil Nadu, the **Gauribidanur Radio Observatory** in Karnataka, and the [Hanle Observatory](#) in Ladakh, Jammu, and Kashmir.