

GOVERNMENT OF INDIA
DEPARTMENT OF ATOMIC ENERGY
RAJYA SABHA
UNSTARRED QUESTION NO. 2054
TO BE ANSWERED ON 11.07.2019

SETTING UP OF NEUTRINO OBSERVATORY

2054. SHRI A. VIJAYAKUMAR:

Will the PRIME MINISTER be pleased to state:

- (a) whether Government has any proposal to set up Neutrino Observatory in Tamil Nadu;
- (b) If so, the details thereof; and
- (c) The number of earth observatories set up in the country?

ANSWER

THE MINISTER OF STATE FOR PERSONNEL, PUBLIC GRIEVANCES & PENSIONS AND PRIME MINISTER'S OFFICE (DR.JITENDRA SINGH):

- (a) Yes, Sir.
- (b) The Government of India has approved a project to build the India-based Neutrino Observatory (INO) at Pottipuram in the Theni District of Tamil Nadu. Briefly, the project aims to set up a 51000 ton Iron Calorimeter (ICAL) detector to observe naturally occurring atmospheric neutrinos in a cavern at the end of an approximately 2 km long tunnel in a mountain. This will help to reduce the noise from cosmic rays that is ever present over-ground and which would outnumber the rare neutrino interactions even in a detector as large as ICAL.

The INO project does not disturb the ecosystem around the site and does not release any radiation, as it does not have any radioactive substance. It measures cosmic rays.
- (c) There is no other neutrino detector anywhere in India at present. ICAL at INO would be the first of its type.
