Goa University @ Electron-Ion Collider to be located at Brookhaven National Laboratory, USA.

Goa University is now a member of a future Electron-Ion Collider (EIC) that will be located at Brookhaven National Laboratory, USA. The Electron-Ion Collider will collide high-energy intense beams of electrons and protons (or heavier nuclei). One of the major goals of Electron-Ion Collider is to unlock the secrets of the gluons. The gluons are massless particles that generate the strong nuclear force that holds quarks together inside protons and neutrons (which constitute more than 90 per cent of the mass of visible matter in the universe). Goa University will participate in silicon tracking and vertexing detector development/construction and EIC software development and validation.

<u>Dr Prabhakar Palni</u> of School of Physical and Applied Sciences will lead the efforts from Goa University.

Details can be found here: Expression of Interest (India's EOI and Goa University's contribution) https://indico.bnl.gov/event/8552/contributions/43200/attachments/31258/49323/EIC.EoI .Indian_Consortiumpublicv4.pdf

For further information, one can visit EIC websites https://www.bnl.gov/eic/goals.php https://phonebook.sdcc.bnl.gov/eic/client/