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Webinar on "Early Formation of Universe & Aditya Mission"

Organized by Astronomy Club, MVJCE.

Webinar on 'Early Formation of Universe & Aditya Mission'

The Astronomy Club and the Departments of Aeronautical and Aerospace Engineering, MVJCE, organized a **Webinar** on '**Early Formation of Universe and Aditya Mission'** from 1.30 PM. to 3.10 PM, on 06th November 2020.

Participants

100 participants from the Astronomy Club, MVJCE, participated in this Webinar. Mr. Antony Samuel Prabu G (AP - AS, Astronomy Club Faculty Coordinator) organized the event, along with the Student Coordinator Mr. Shashi R Mistry (1MJ17AE054).

The Guest Speaker

Prof. Dipankar Banerjee is an astrophysicist working in Indian Institute of Astrophysics. He holds a bachelor's degree in Physics and master's degree in Theoretical Physics from the University of Kolkata. He has obtained his PhD from Indian Institute of Astrophysics and completed two postdoctoral tenures in reputed institutions in Europe. Dr. Banerjee's area of interest is the Sun and the solar atmosphere. His work involves theoretical and numerical modelling using data from ground and space-based instruments. His work has enriched our understanding of the Sun and its impact on Space Weather.

He is the Head of the Science Working Group and Co-PI of the Coronagraph payload to be launched on the Indian Satellite *'Aditya'*, by ISRO. *Aditya* is the first dedicated Indian mission to study the Sun. He is also the Project Coordinator for the National Large-Scale Telescope Project (NLST). NLST is a proposed 2-meter ground-based telescope planned to be installed at a Himalayan site.

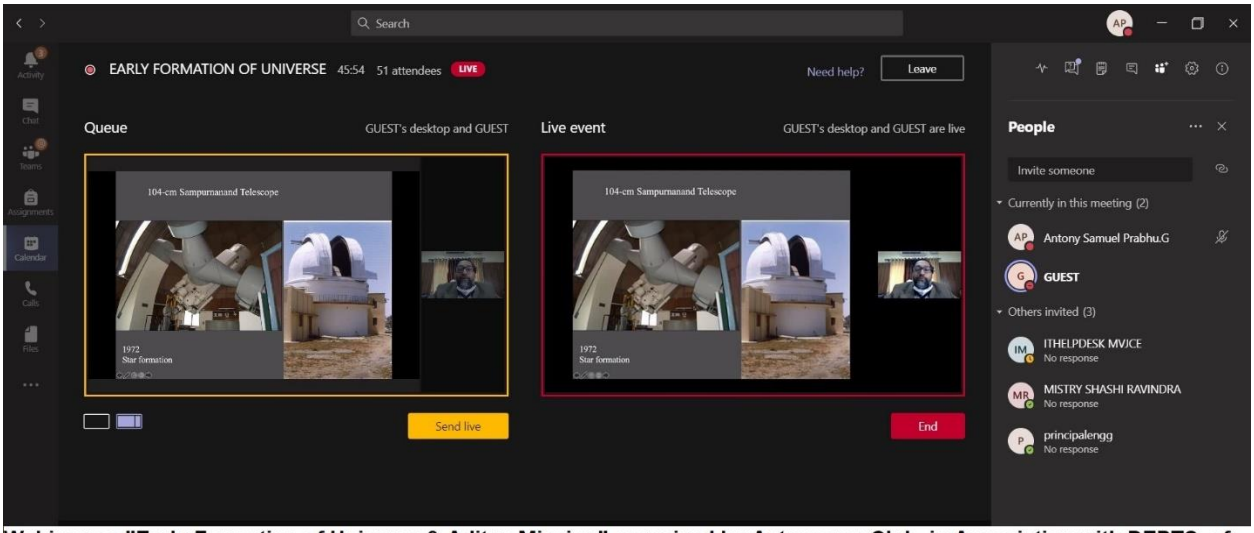
Dr. Banerjee has 100 peer-reviewed publications to his credit, with around 1800 Citations in International Journals. He is currently supervising 6 PhD students, while 10 others have already completed their PhD. He is a member of various international scientific organizations like Royal Astronomical Society of UK, International Astronomical Union etc. He was the Secretary of Astronomical Society of India. He is on the panel of referees for all the main international astronomy-astrophysical journals.

Apart from his illustrious scientific career, Dr. Banerjee is keenly interested in various other activities, too. He is an avid follower of all sorts of sports and was part of the IISc football team for 5 years. Dr. Banerjee is trained in Hindustani vocal music and participates in various music programmes. He is the President of a Bangalore-based Bengali Theatre group and regularly performs in plays, in and outside Bangalore. He is interested in photography and travelling, too. He has been lucky to have travelled from Easter Island near Chile to mountains in China, chasing the Solar Eclipse. He also had the privilege of observing and taking photographs of the Solar Eclipse, from an open-hatched military aircraft. Dr. Banerjee's love for Science and zest for life are truly infectious and inspiring.

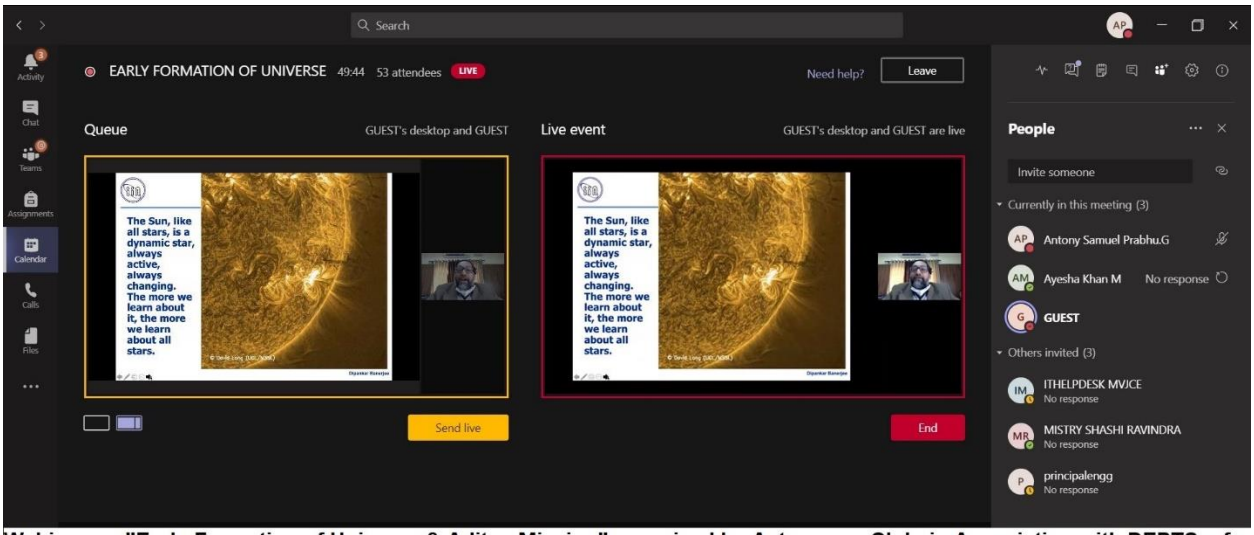
Lecture on Early Formation of Universe & Aditya Mission

Prof. Dipankar Banerjee gave an introduction about Aditya L1: India's first dedicated space mission to study our nearest star, the Sun. He explained about the different types of telescopes in and around the world. He then spoke about the Sun as a dynamic star, and went on to explain the concepts of Photosphere, Lower Chromosphere, Upper Chromosphere, Corona, Corona Mass Ejections (CMEs), Solar Influence etc.

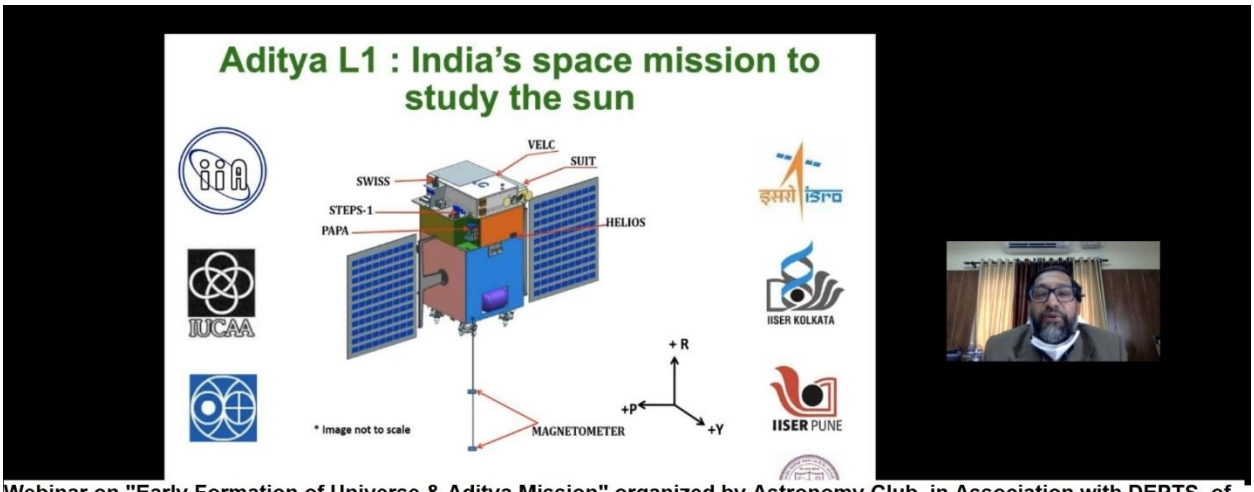
In the final phase of the webinar, he dealt with the *Aditya* mission in terms of multiwavelength Sun. Four images of the Sun are taken from the infrared, optical, ultraviolet and X-ray telescopes. Astrophysicists use many telescopes designed to capture Specific wavelength of light to create a more complete picture of the sun. He also briefed the audience about Visible Emission Line Coronagraph (VELC), Solar Ultraviolet Imaging Telescope (SUIT), Aditya Solar Wind Particle Experiment (ASPEX), Solexs, HELIOS, Magnetometer, Payload Stowed View of Aditya-L1, VELC imaging FOV, Temperature and global field.



Webinar on "Early Formation of Universe & Aditya Mission",organized by Astronomy Club, in Association with DEPTS. of Aeronautical & Aerospace Engineering, MVJCE on 06th November 2020. Dr.Diparker Banerjee explaining about the TYPES OF TELESCOPES AND THEIR APPLICATIONS in the live webinar.



Webinar on "Early Formation of Universe & Aditya Mission",organized by Astronomy Club, in Association with DEPTS. of Aeronautical & Aerospace Engineering, MVJCE on 06th November 2020. Dr.Diparker Banerjee explaining about the Aditya Mission with respect to Sun Radiation.



Webinar on "Early Formation of Universe & Aditya Mission",organized by Astronomy Club, in Association with DEPTS. of Aeronautical & Aerospace Engineering, MVJCE on 06th November 2020. Dr.Diparker Banerjee explaining about Aditya L1 Mission working principle.

Outcome of the Webinar

Prof. Dipankar Banerjee shared his extensive knowledge of the subject with our students. The lecture kindled the interest of students in the field of astronomy, especially with respect to Aditya L1, India's Space Mission to study the Sun. They learnt new concepts like analysis of Corona, analysis of the different layers of the Sun and its temperature, Sun's magnetic field etc., which may motivate them to do further research on the Sun.