

BRACU holds video-seminar on astrophysics

→ Sun Campus Desk



BRAC University successfully conducted a video-seminar on “Astrophysics of white dwarf, pulsar & black hole” in collaboration with University of Indonesia, Tribhuvan University, Nepal and Tokyo Development Learning Centre (TDLC), Japan. It was held on Thursday at Bangladesh time 9:00 am to 11:00 am

The key presentation was delivered by eminent plasma astrophysicist Mofiz Uddin Ahmed, Professor at the Department of Mathematics

and Natural Sciences, BRAC University.

Fahima Khanam, Assistant Director, ITSO, BRAC University, was the moderator of the entire session. Dr Md. Khalilur Rhaman, Associate Professor, Department of Computer Science and Engineering, BRAC University, was present along with a good number of in-house participants, students and faculties.

The two-hour discussion was focused on space, birth of stars, formation and evolution of astrophysical compact objects like White Dwarfs, Pulsars, Black Holes and Super-massive Black Holes etc. The basic principle of modern cosmology, expansion of the universe, different astrophysical observations was also highlighted and supported by some videos.

The key-note speaker dedicated his speech to late Professor Emeritus Jamal Nazrul Islam who was a renowned mathematical physicist, cosmologist and educationist.

To start with, he talked about the famous Einstein-Tagore discussion of 1926 (at Einstein's home in Berlin) where they exchanged their own respected ideas about universe and harmony of nature.

Professor Mofiz Uddin Ahmed continued: "A star is born from a proto-star and evolved to a red giant. And from a red giant two ways of evolution occurs, the Black Dwarf and the Black Hole which depend on the initial mass of the star. This limiting mass is called the Chandrasekhar Limit which is in the order of 1.4 times of the solar mass. If the mass is below the limit, it goes to the Black Dwarf and if it is higher, it is either a Neutron Star or a Black Hole."

He showed a video on Crab-pulsar formation during the delivery and mentioned about his work on gravitational waves related to pulsar. Lastly he informed the audience about the development of Plasma Astrophysics Laboratory at BRAC University which is composed of a system of Glow Discharge Plasma, Langmuir Diagnostics and Magnetized plasma for fusion and Space science.

A wide range of partakers from Indonesia, Nepal and from BRAC University joined the program using distance mode of learning which is initiated in Bangladesh for the very first time. The event was very interactive and fulfilled with question-answer sessions and live discussions.