

## Department of Physics

Science College, Kokrajhar  
Kokrajhar  
B.T.C., Assam, India

# National Webinar on Astrophysics

The Department of Physics, Science College, Kokrajhar in collaboration with IQAC, SCK and SJCC, SCK is organizing a National webinar on Astrophysics **on 30/09/2020 at 05:00 p.m.**

### **Talk (1) - "Astrophysical Double layers and Double Layers in Laboratory"**

**Resource Person: Dr. Suraj Kumar Sinha**

Associate Prof.  
Department of Physics  
Pondicherry University, Pondicherry

### **Talk (2) – "Neutrinos at the crossroads of particle physics, astrophysics and cosmology."**

**Resource Person: Dr. Debasish Borah**

Assistant Professor  
Department of Physics, IIT Guwahati  
Assam, India

To register please fill and submit the g-form via link

<https://forms.gle/f6UyAkzXDUe1sbzD9>

The Webinar will be streamed through Zoom platform and will be broadcast live on YouTube. All updates like links to join webinar etc. will be shared through the Telegram group created for the purpose. So to join the group please download the Telegram app and click link given below

<https://t.me/joinchat/AAAAAFhV4F-cu7TYiscjaw>

For other details kindly refer to the brochure.

With best regards,  
Rabindra Mahato  
9854048790

**Patron-**

**Dr. R. N. SINHA**  
Msc, PhD, LLB, D.Litt  
Principal  
Science College, Kokrajhar

**Chairperson-**

**Mr. A. SINGH**  
Head of the Department  
Department of Physics  
Science College, Kokrajhar

**Convener-**

**Mr. R. MAHATO**  
Vice-Principal & Asst. Prof.  
Department of Physics  
Science College, Kokrajhar

**Collaborators-**

**Mr. S. K. THAKUR**, Asst. Prof.  
Secretary, SJCC, SCK

**Mr. B. Nath**, Asst. Prof.  
Co-ordinator, IQAC, SCK

**Mr. B. C. Ghosh**, Asst. Prof.  
Joint Co-ordinator, IQAC, SCK

**Members-**

**Mrs. F. Brahma**, Asst. Prof.  
Department of Physics

**Mr. B. Dey**, Asst. Prof.  
Department of Physics

**Miss R. Chakraborty**, Asst. Prof.  
Department of Physics

**Contact Person**

Convener, Ph. No. 9854048790



Revised Brochure : 25/09/2020

**SCIENCE COLLEGE, KOKRAJHAR**  
KOKRAJHAR, BTC, ASSAM  
PIN. 783370

**NATIONAL WEBINAR ON**

**Talk (1) - "Astrophysical Double layers and Double Layers in Laboratory"**

Many believe that Big Bang is a myth created by complex mathematics and far away from real universe. On these grounds, Nobel Laureate H. Alfvén and Oskar Klein developed Alfvén Klein cosmology, which the universe is made up of equal amounts of matter and antimatter with the boundaries between the regions of matter and antimatter being delineated by cosmic electromagnetic fields formed by double layers, thin regions comprising two parallel layers with opposite electrical charge. In this talk, results of formation of double layers in laboratory will be presented.



**Resource Person: Dr. Suraj Kumar Sinha**

Associate Prof.  
Department of Physics  
Pondicherry University, Pondicherry

**Organized by:**

**Department of Physics  
Science College, Kokrajhar**

**In collaboration with:**

**IQAC, Science College, Kokrajhar  
& Silver Jubilee Celebration Committee,  
Science College, Kokrajhar**

**Talk (2) - Neutrinos at the crossroads of particle physics, astrophysics and cosmology.**

Neutrino, the lightest fermion and the second most abundant particle in the universe, has played a very important role in our understanding of fundamental physics. While it was hypothesized by Pauli in 1930 to make the observations in beta decay consistent with energy conservation, later on several experiments revealed many interesting features of neutrino and its sources. Neutrinos also play important roles in several astrophysical systems and the evolution of our universe. This talk aims to cover some aspects along these lines while pointing out the problems of ongoing research and future prospects.



**Resource Person: Dr. Debasish Borah**

Asstt. Prof.  
Department of Physics, IIT Guwahati  
Assam, India

Revised Brochure : 25/09/2020

**Join with us:**

On 30.09.2020 at 05:00 PM to 7:00 PM IST

**Register at (Free)**

<https://forms.gle/f6UyAkzXDUe1sbzD9>

- ★ For further communication join the telegram group:  
<https://t.me/joinchat/AAAAAFhV4F-cu7TYiscjaw>  
(Please download telegram app and to join click the link)
- ★ All participants will be given e-certificate on attendance during the entire session and submission of feedback.

With best regards,

Convener  
Rabindra Mahato  
9854048790