

National Webinar
On
“Tourism in Space: A Mathematical Overview”

Department of Applied Sciences, Galgotias College of Engineering & Technology, Greater Noida organized a **National Webinar on “Tourism in Space: A Mathematical Overview”** on **3rd September 2020**.

The theme of the webinar was a multidisciplinary field, which covers different mathematical and technical aspects of dynamics of a spacecraft/satellite in space. It's aim was to motivate Faculties, young researchers and PG students by introducing basic ideas about the classical problem of the celestial mechanics so that they can explore their ideas on realistic models, which may address the dynamics of a satellite in space via results of mechanics, methods of mathematics and tools of computer science etc.

Eminent Speakers:

Dr. RAM KISHOR

Assistant Professor

Department of Mathematics,

Central University of Rajasthan, Ajmer, Rajasthan (INDIA)

Visiting Associate

Inter-University Centre for Astronomy and Astrophysics, Pune (INDIA)

Topic: Restricted Problem of Three Bodies : An unsolved Problem

&

Prof. M.Xavier James Raj,

Head, Orbital Analysis Section (Rtd)

Applied Mathematics Division,

Vikram Sarabhai Space Centre, ISRO

Topic: Low Cost Travel to Moon/Mars

Webinar was conducted through **Google meet and Facebook live**. From the first day of opening registration for Webinar, we had a massive response of over **750 participants** including researcher, academicians and students over 500 organization across the globe, out of them **367 participants** were successfully participated.

The **convener and organizer** of the National Webinar was Dr. Rajesh Tripathi (HOD AS) and Dr. Vinay Gautam (Assistant Professor, Mathematics), respectively. Also, event was **coordinated** by Dr. Padam Singh (Assistant Professor, Mathematics).

The outcomes & objectives achieved were as follows:

- ❖ National Webinar covered different mathematical and technical aspects of the dynamics of spacecraft/satellite in space.
- ❖ National Webinar covered basics of classical problems of the celestial mechanics.
- ❖ National Webinar motivate faculties and young researchers to explore their ideas on realistic models.

Dr. Ram Kishor is presenting

RTBP in History

- History of RTBP begins with Euler and Lagrange in 1772, continues with Jacobi (1836) and Hill (1878) followed by Poincaré (1899), Levi-Civita (1905), Birkhoff (1915) and many more. The span of almost 350 years from Euler until now, includes many other great names and their important contributions too.
- Euler's important contribution was the introduction of **synodic coordinate system**, which led to an integral of equation of motion, known as Jacobi integral. This integral was first discovered by Jacobi, in a sidereal coordinate system.
- Prior to his Lunar theory in 1760, Euler gave the solution of the Problem of two fixed centers of force (which is a highly simplified form of RTBP).
- The significance of this problem is limited because fixed force centers do not occur either in celestial mechanics or in its applications. However, two fixed centers of force problem can be solved in closed form and has numerous indirect applications.

Dr. Ram Kishor, (CURAJ): The Restricted Three Body Problem (An Unsolved Problem) - p.15/46

Dr. Vinay gautam

SIDDHARTHA BISWAS

Dr. Ram Kishor

Smitha Suresh

National Webinar on "Touris..."

People (250) Chat

SOWMYA T 4:57 PM
can you share the PPT to our mail sir...

You 4:57 PM
Very informative session.. thank you Sir

Pratiksha Talukder 4:58 PM
Very informative session.. thank you Sir

You 4:58 PM
it will be share in q&A session

mallikarjun kote 4:58 PM
Resend the feedback link please

jini varghese p 4:58 PM
Thank you sir

Send a message to everyone

35 views

Thank You

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People (234) Chat (29)

tri sandhya

tutor 4

Urooj Zehra

v.ramakrishna@cvr.ac.in Mr. V.

Vaishnav Sharan

Vedika Mishra

Vikash Sahu

Virtual IHCE