WORKSHOP
ON
CELESTIAL MECHANICS
&
DYNAMICAL ASTRONOMY
JANUARY 07-11, 2019

Organized by

Department of Mathematics
Central University of Rajasthan
NH-8, Bandarsindri, Kishangarh-305817,
District-Ajmer, Rajasthan

Sponsored by

Inter-University Center for Astronomy and Astrophysics , Pune Univ. Campus, Ganeshkhind, Pune-411007, Maharashtra

PATRON

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Prof. Arun K. Pujari

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SPEAKERS

Prof. Bhola Ishwar, BRAU, Muzaffarpur
Prof. Ranjan Gupta, IUCAA, Pune
Prof. Rashmi Bhardwaj, GGSIU, New Delhi,
Prof. S.N. Hasan, MANUU, Hyderabad,
Prof. Manish D. Shrimali, CURAJ, Kishangarh
Dr. M. Xavier James Raj, VSSC-ISRO
Dr. Kanak Saha, IUCAA, Pune
Dr. B. S. Kushvah, IIT (ISM), Dhanbad
Dr. Anand Kumar, CURAJ, Kishangarh
Dr. Amit Chakraborty, CURAJ, Kishangarh
Dr. Ram Kishor, CURAJ, Kishangarh

ABOUT COURSE

The theme of the workshop is a multidisciplinary field, which covers different aspects of celestial mechanics and dynamical astronomy in addition to the advanced methods of mathematics. It's aim is to motivate young researchers and PG students by introducing basic ideas about the principles of celestial mechanics and dynamical astronomy so that they can explore their ideas on realistic models of many areas of astronomy, dynamical astronomy, astrophysics, celestial mechanics, mechanics, computer science etc..

TOPICS TO BE COVERED

Astronomy- Basics of Astronomy, The Stars, The Solar System and the Milky Way, Explanatory systems.

Dynamical Astronomy- Invariant Manifold, Periodic and Quasi-periodic Orbits , Orbital Transfer and Mission Design.

Celestial Mechanics- Basics of Celestial Mechanics, N-Body problem, Stability and Control, Lyapunov Exponents, Normal Forms and Normalization Techniques.

ELIGIBILITY FOR PARTICIPATION

1. M.Sc. (1^{st} & 2^{nd} year) students with mathematics/ physics/ computer science may apply.
2. B.Sc. (3rd year) or B.E./B. Tech. students with exceptional academic record may also apply.
3. Research scholars and faculty members working in the area of workshop's theme may also apply.

Note- Selection of a candidate will be based on merit, so mail scan copy of your mark sheets separately at cmda2019@gmail.com

PREREQUISITES

A good knowledge of mathematics/ physics/ computer science is required. Candidates having adequate knowledge of linear algebra, differential equations, difference equations, programming languages will be given preference.

HIGHLIGHTS

1. Eminent Speakers
2. Interaction Sessions
3. Hands-on Sessions

DEADLINES

Registration- 15.10.2018
Recommendation Letter- 25.10.2018
Confirmation (by Email)- 01.11.2018

REGISTRATION

No registration fees. For registration, fill-up online form at the link-

https://goo.gl/forms/WFNpdhUGE2CMbAlN2

ABOUT THE UNIVERSITY

The Central University of Rajasthan (CURAJ) has been established by an Act of Parliament (Act No. 25 of 2009) as a new Central University, and is fully funded by the Government of India. The President of India, His Excellency Shri Ram Nath Kovind, is the Visitor of the CURAJ. Prof. Arun K. Pujari is the Vice Chancellor of the University. CURAJ is located in Ajmer district of Rajasthan. University has 11 schools of studies accommodating 22 different academic departments and 01 community college. To know more about the CURAJ, one may visit university website at http://curaj.ac.in.

ABOUT THE DEPARTMENT

Department of Mathematics came into existence at the starting of the University in 2009, under the school of Mathematics, Statistics and Computational Sciences with unique programme M.Sc. Tech. Mathematics (6 semesters). Later, 4 new programmes namely, Int. M.Sc. Mathematics (10 semesters), Int. M.Sc. B.Ed. Mathematics (6 semesters), M.Sc., Mathematics (4 semesters) and Ph.D. in Mathematics were added in the Department. Department has been recognized as DST-FIST grantee in 2014. Current strength of the Department are as- faculty-10 and students around 210.

ACCOMMODATION

Free accommodation will be available in the hostels (girls and boys) in the campus. A limited accommodation for the participants may be arranged in University Guest House on self payment basis (Rs. 300 and Rs. 500 per night), which is subject to availability.

TRAVEL ALLOWANCE

TA will be reimbursed (only sleeper class rail fare and non-AC bus fare through shortest route on production of valid tickets) to those participants, who do not have any kind of fellowships/stipend and belongs to University, College, Research Center etc., which is governed by UGC, New Delhi. Participants other than UGC funded organizations, may request for the TA through separate application. Few application may be considered, in case, funds are available.

HOW TO REACH UNIVERSITY

From Jaipur: One can reach Jaipur via train, flight and bus. From Jaipur airport or railway station, one can take a taxi or an auto and reach either RSRTC bus stand (Sindhi-camp) or 'Dosau Feet Chauraha' and board a bus going to Ajmer. Get a ticket till Bandarsindri (~Rs. 100) and get down at Bandarsindri bus stop. From there, take University van service to reach the campus. One may also take a taxi directly from the airport or the railway station to reach the University campus (~Rs. 2200).

From Ajmer: One can reach Ajmer by train or bus. From railway station, take an auto to reach the RSRTC bus stand and board a bus going to Jaipur. Get a ticket till Bandarsindri (~Rs. 60) and get down at Badarsindri bus stop. From there take University van service to reach the campus. One may also hire a taxi directly from the railway station up to University (~Rs. 1500).

From Kishangarh : From Kishangarh railway station or bus stand, take either a direct auto to the University campus (~Rs. 400) or reach to Kishangarh bus stand by auto. Board a bus going to Jaipur and get down at Bandarsindri bus stop. From there, take University van service to reach the campus.

CONTACT FOR DETAILS

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