



R. J. COLLEGE of Arts, Science & Commerce (AUTONOMOUS)

(Hindi Vidya Prachar Samiti's RAMNIRANJAN JHUNJHUNWALA COLLEGE of Arts, Science & Commerce)

Opposite Ghatkopar Railway Station, Ghatkopar (West), Mumbai 400086, Maharashtra, INDIA.

Website: www.rjcollege.edu.in

Email: rjcollege@rjcollege.edu.in

Tel No: +91 22 25151763

Fax No: +91 22 25150957

College is recognized under Section 2(f) & 12(B) of the UGC Act, 1956

Affiliated to UNIVERSITY OF MUMBAI || NAAC Re-Accredited 'A' Grade (CGPA: 3.50)

22nd JUNE, 2020

NOTICE

The department of physics is organising RJC Physics lecture series in association with IAPT Mumbai Sub RC under DBT star college activity. This activity intends to develop the capacity skills of students and for improving student capability by appraising them of the recent trends in technology. The lecture would be delivered by eminent physicist and would be interactive. the details of the session is available in the brochure. the session would be online on zoom platform.

Session: 25th , June, 2020, 4PM

Resource Person: Dr Tarun Souradeep, IISER, Pune

Topic : LIGO INDIA: Beyond Discovery of Gravitational Waves

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DBT STAR COLLEGE ACTIVITY

RJC Physics Lecture Series 5:

LIGO-India: Beyond discovery of Gravitational waves

Dr. Tarun Souradeep, Department of Physics, Indian Institute of Science Education and Research, Pune

Dr. Tarun Souradeep is Professor and Chair in the Department of Physics at Indian Institute of Science Education and Research, Pune. His research interests are in Cosmology, Gravitational waves Physics and Astronomy (LIGO-India).



25th June, 2020 Thursday

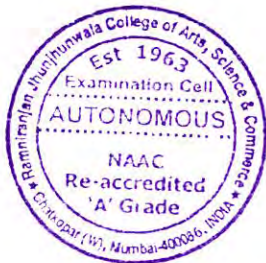


4.00 pm



Zoom Platform & Live on YouTube: <https://www.youtube.com/rjcopencourseware>
OR <https://youtu.be/gV1cnivaZEK>

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T. S. Principal
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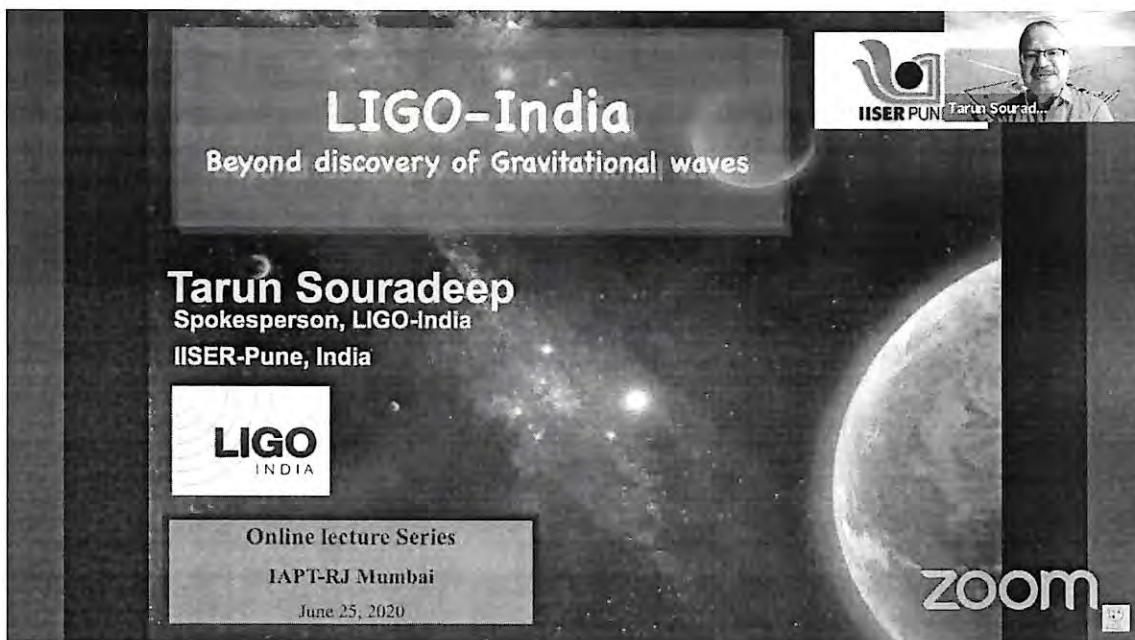
REPORT

Capacity Development and skill enhancement activity organised for improving students capability (Awareness of Trends in Technology)

Prof. Tarun Souradeep (IISER, Pune) - 25 June - LIGO-India: Beyond discovery of gravitational waves

You Tube link: <https://www.youtube.com/watch?v=gV1cnivaZEK>

Dr. Tarun Souradeep is Professor and Chair in the Department of Physics at Indian Institute of Science Education and Research, Pune. Abstract: The historic discovery of gravitational waves through direct detection by the LIGO observatories in the USA, in principle, opens up a new window for astronomy. In practice, however, the true launch of gravitational-wave astronomy will await the global array of LIGO like observatories including the planned LIGO-India observatory recently flagged off by the Union cabinet of India. I will review the momentous discovery, the potential of gravitational-wave astronomy and the promise of LIGO-India.



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Einstein's Gravitation

Matter tells space-time how to curve, and
Space-time tells matter how to move.

Matter in motion → Space-time ripples (fluctuations that propagate as Gravitational waves (GW))

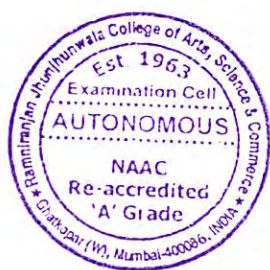
- In GR, as in EM, GW travel at the speed of light (i.e., mass-less); are transverse and have two states of polarization.
- A major qualitatively unique prediction beyond Newton's gravity

Now directly verified !!!

zoom

Tarun Sourad...

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[Signature]
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DEPARTMENT OF PHYSICS

Guest Lecture : "LIGO-India : Beyond discovery of Gravitational waves"

on 25th June, 2020

STUDENTS ATTENDANCE SHEET

SR NO	ROLL NO	CLASS	NAME OF THE STUDENT PARTICIPANT
1	3	MSC - II- PHY	JESWANI AJAY JAGDISH
2	5	MSC - II- PHY	KARANGUTKAR SIDDHESH AMARDEEP
3	8	MSC - II- PHY	NAIR SREELAXMI SUDHAKARAN
4	4	MSC - II- PHY	KANGRALKAR NAKUL SURESH
5	9	MSC - II- PHY	PILLAI LEKSHMI HARI KUMAR
6	11	MSC - II- PHY	SHAIKH SHARUKH DILSHAD
7	13	MSC - II- PHY	UPADHYAY ANKIT KUMAR OMPRAKASH
8	15	MSC - II- PHY	YADAV RAHUL KAPTAN SINGH
9	7	SYBSC	CHAURASIYA ADARSH TAPASVILAL SHOBHAVATIDEVI
10	8	SYBSC	DALAI SANKET SANTOSH SUDHA
11	9	SYBSC	GAUTAM JAIPRAKASH CHINGUD PARVATI
12	10	SYBSC	GOND SANDHYA DEVKUMAR KANCHAN
13	11	SYBSC	GUPTA NIKHIL ARVIND REKHA
14	17	SYBSC	JHA JAYESH AKHILESHWAR KIRAN
15	18	SYBSC	KHAN ADIBA KHALIL UR REHMAN FOUZIYA
16	20	SYBSC	KHAN ANUFA BANO IBRAHIM RUBEENA BANO
17	29	SYBSC	MOHMMAD AKHTAR RAZA RAZA HUSSAIN ZARINA
18	40	SYBSC	SHAIKH TANVIR MAHEBOOB SHAKIRA
19	42	SYBSC	SHARMA EKTA RAMLALAK MEERA
20	53	SYBSC	TIWARI SHILU BASHIST SAROJ
21	55	SYBSC	TIWARI SUMIT AVADHESH SUBHADRA
22	56	SYBSC	YADAV DHEERAJ KUMAR LALBAHADUR MALADEVI
23	69	SYBSC	MISHRA ABHISHEK KUMAR RAJESHWARIPRASAD KUSUM
24	80	SYBSC	KHAN MOHAMMAD SALAMUDDIN SHAMSUDDIN SIFTAIN
25	83	SYBSC	YADAV PARESH AMBIKA
26	85	SYBSC	PRAJAPATI AVANISHKUMAR SANJAY



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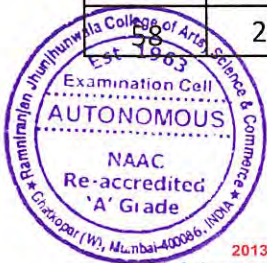
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27	104	SYBSC	KHAN ZAID ANWAR SAMINA
28	107	SYBSC	POOJARI LAKSHITA SANTOSH GEETA
29	110	SYBSC	SHAIKH MOHAMMAD AADIL SAGIR AHMED FULBANO
30	122	SYBSC	YADAV SARVESH SATYANARAYAN
31	202	SYBSC	CHAURASIYA SUMIT ASHOK SHEELA
32	205	SYBSC	GUPTA SAGAR SHIVCHARAN SUNITA
33	212	SYBSC	PRAJAPATI MAHENDRALAL HIRALAL KESHAR
34	214	SYBSC	RAI AMAN RAJESH ANITA
35	216	SYBSC	SHAIKH SHAHEENBANO MOHD SAFIQUE ALAM NOORAFI
36	224	SYBSC	YADAV SANDEEP BHARAT BADAMADEVI
37	227	SYBSC	TALPE YASH YOGESH GAYATRI
38	228	SYBSC	GUPTA ROHAN RAJU SUMAN
39	231	SYBSC	YADAV AARTI SOHIT URMILA
40	232	SYBSC	YADAV ANKIT SAROJ GEETA
41	233	SYBSC	YADAV PHULENDRA SATISHSINGH MANJUDEVI
42	235	SYBSC	PANDEY GANESH NANDLAL
43	201	TYBSC	ANSARI ZINNAT JANHA BADRUDDIN FATMA KHATOON
44	202	TYBSC	ASRAF NISHA A MUMTAJ
45	205	TYBSC	DHAR KARAN PRADEEP KAKOLI
46	208	TYBSC	DUBEY RISHABH SHAILENDRA MANEI BINDUDEVI
47	210	TYBSC	GUPTA ABHISHEK NANDKISHOR SHARADA DEVI
48	217	TYBSC	KANAUJIYA ANKUSH KAILASH GEETADEVI
49	223	TYBSC	MANE KRITIKA MANISH SANDHYA SANDHYA
50	224	TYBSC	MAURYA SOMESHKUMAR RAMESH SUBHDRA
51	225	TYBSC	MOURYA ROSHAN MAHAVEER USHA
52	227	TYBSC	PANDEY SHIKHA ANILKUMAR NISHA
53	238	TYBSC	SHARMA RANI BABULLE REKHA
54	244	TYBSC	VISHWAKARMA SANDHYA LALBAHADUR SANGEETA
55	245	TYBSC	YADAV AMIT ASHOK MEENA MEENA
56	246	TYBSC	YADAV BHARATI MAUZI LAL GULAB DEVI
57	248	TYBSC	YADAV SHUBHAM VINOD DHARM SHEELA
	250	TYBSC	KHAN ANJUM ARA MOHDAMMED RAFIQUE



Principal
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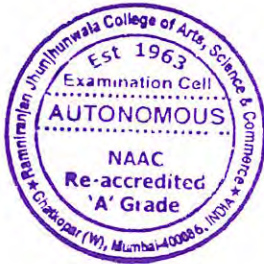
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60	254	TYBSC	SAIFI NISHAD CHANDMOHAMMED
61	255	TYBSC	SHAIKH SAMINA IBRAHIM
62	256	TYBSC	SHARMA SARASWATI CHETRAJ
63	259	TYBSC	TRIPATHI UTKARSH JAGDISH PRASAD KUSUM
64	260	TYBSC	TAHSEEN BANO MOHD FAROOQUE




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DBT STAR COLLEGE ACTIVITY

Certificate of Participation


This is to certify that Pandey Ganesh of SYBSc attended the lecture
LIGO India: Beyond discovery of Gravitational Waves delivered by **Dr. Tarun Souradeep** of Indian
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Head, Department of Physics



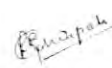
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Head, Department of Physics



Principal




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