

3.3.2. DP 005

CENTRAL UNIVERSITY OF KERALA

DEPARTMENT OF PHYSICS

REPORT

National Webinar Series (Science Day)

Department of Physics, CUK had conducted four days national webinar series in connection with National science day during February 22-26, 2021. The programme was inaugurated by Prof.Venkateshwarlu, Hon' Vice Chancellor, CUK and Dr.Prasad made introductory remarks Dr. Swapna S Nair, Head of the Department, CUK welcomed the gathering. Eminent speakers from various part of India delivered the talks during webinar series. During this webinar series the speakers emphasised the importance of scientific research and scientific temper. The webinar covered various topics from nuclear physics, astro physics, Bose Einstein Condensate and General talk on scientific temper. The webinar series provided the students participants and opportunity to learn about various cutting edge research areas and also given opportunities to interact with leading scientist across the country. Average of 64 participants attended the programme every day.

National Science Day Celebration 2021 (NSDC 2021)



Department of Physics
Central University of Kerala



National Webinar Series

Day-01 (22.02.2021)

Program Schedule

11:30 - 11:33 am

Introductory Remarks : Dr. E Prasad, Co-ordinator, NSDC- 2021

11:33 - 11:36 am

Welcome Speech : Dr. Swapna S Nair, HoD, Dept. of Physics, CUK

11:36 - 11:45 am

Inauguration : Prof. H. Venkateshwarlu Hon'ble Vice Chancellor, C U K

11:45 - 11:47 am

Speaker Introduction : Prof. K M Varier, Former HoD, Dept. of Physics, University of Calicut

11:48 - 12:30 pm

Speaker : Dr. B P Ajith Kumar, Scientist H, IUAC New Delhi

Topic: Science –The Unifying Force

Chair of the Session : Prof. K J Thomas

Meet link: meet.google.com/ytv-teja-vnb



Prof. H. Venkateshwarlu
Hon'ble Vice Chancellor, C U K

Coordinator: Dr. E Prasad

Organizing Committee:

Dr. Swapna S Nair
Dr. K J Thomas
Dr. Vincent Mathew
Dr. S C Sahoo
Dr. P M Aneesh &
Research Scholars



Dr. P B Ajithkumar
<https://scischool.in/talks/index.html>

REC Ajith Kumar is presenting

National Science Day - 100th Anniversary

Meet - yta-leje-vnb

Class List

72 of 118

Enter any notes specific to this class.

You're presenting to everyone

Stop presenting

Praveen Kumar .C

Irshad K A

Ratheesh A

Subha A

Sahala Abdul

Nimmy Sarda Alex

Anaswarani

Ashna

Nandana A B

Ravi Sankar Babu

Roshni Benny

Dinesh

Sruthi

Neeli Chandran

Rishi Chaurasia

KM

PHYSICS

KM Varier

Department of Physics

Rishi Chaurasia

Kalarikad Thomas

J

Prasad Nair

Abinaya Kamath

Anthony Joseph

JYOTHSI K

Meeting details

National Webinar: Science - The U...

Google Meet Attendance - v1.4.3

Ajith Kumar

Kalarikad Thomas

Prasad Nair

National Webinar: Science - The U...

People (51)

Chat

Add people

Host controls

RAISED HANDS

KM KM Varier

IN CALL

PHYSICS Department of Ph... (You)

Abinaya Kamath

Raise hand

Turn on captions

Ajith Kumar is presenting

National Science Day Celebration 2021 (NSDC-2021)**Webinar series****List of Participants on Webinar series Day-01 (22.02.2021)**

1. Prof.(Dr.) Venkateshwaralu (Vice Chacellor, C U Kerala)
2. Dr. E Prasad
3. Aadithia Mohanan
4. Vincent Mathew
5. Prof. KJ Thomas
6. Dr. Swapana S Nair
7. Dr. PM Aneesh
8. Dr. S C Sahoo
9. Abhisek Mallick
10. Abinaya Kamath
11. adithya s nair
12. Adithyan thrithallor
13. Aiswarya Robert
14. AJAY MOHAN K
15. Ajith Kumar
16. AKASH DOMINIC THOMAS
17. Akhila Gopinath
18. amisha t
19. Anaghamrutha p v
20. Anees K T
21. Anjali T Vinod
22. Antony Joseph
23. ARDRA SURENDRAN KP
24. ashna b
25. ASWATHI PK
26. Athira P S
27. Cristeena Devassia
28. Department of Physics
29. Dinesh Boda
30. Divya M
31. Dr KJ Thomas Prof Physics
32. Dr. S. Kailas
33. Ganga R Nair
34. Greeshma K
35. Irene Joy Valiaveetil
36. jeswin Raju

37. JYOTHISH K
38. KM Varier
39. M P

40. Manjunaath M K
41. MEGHNA M
42. Nandana A B
43. Nandhakishor klsry
44. Nimmy Sarah Alex
45. Nitheeshpraba Mohan
46. Nithya Madhu
47. PARVATHY M R
48. pavan kumar
49. Priyabrat Das
50. Rakesh S
51. Ravi Sankar Babu Balabhadrapatruni
52. Mohammed Shameer
53. Rishi Chaurasia
54. Roshni Benny
55. Ruksana
56. Sabeel PK
57. SAHALA ABDULLA
58. Sandeep K S
59. SANGEETHA CK
60. shilna kv
61. Shiva Prasad Nayak
62. SILPA CS
63. Sruthi C
64. Sudhansu Rayaguru
65. Yadukrishnan Yadu Pvr
66. Zeenath

009-1

National Science Day Celebration 2021 (NSDC-2021)

Webinar series

Feedback

Prasad Nair

1:11 PM

please provide feedbacks.

KM Varier

1:12 PM

Very interesting topic and ery well presented by Dr. ajith.

Rishi Chaurasia

1:12 PM

A very thought provoking and enlightening talk !

Adithyan thrithallor

1:15 PM

Great presentation. Today social media is floaded with pseudo science. This presentation very thought provoking. Given us light to think clearly. Thank u sir

AKASH DOMINIC THOMAS

1:16 PM

The talk and the topics is a clear reminder that the world needs more scientist and people of science. I personally find the talk to be thought provoking . Thankyou sir !!!

National Science Day celebration 2021

Day 1: 22-02-2021, Monday,

Speaker: Dr B P Ajith Kumar, Senior Scientist (H), Inter University Accelerator Centre, New Delhi

Topic: Science: the unifying force

Science day celebration was inaugurated by Prof. Venkateswarlu, Hon'ble VC CUK at 11.20 AM.

Dr Prasad made introductory remarks. Dr Swapna S Nair welcomes the audience and Prof. K. M. Varier, former Head, Department of Physics, Calicut University introduced the speaker. Prof. K. J. Thomas chaired the session.

Dr B P Ajith Kumar in his talk took the participants through the developments of Science. He disclosed the pseudo-science and the propaganda based on false claims. He emphasised that science is the only religion and the nature is the holy book of this religion. The talk was very thought provoking and informative.

Prof Thomas moderated the interaction sessions. More than 60 participants attended the webinar. Dr E Prasad proposed vote of thanks.

National Science Day Celebration 2021 (NSDC 2021)



Department of Physics
Central University of Kerala



National Webinar Series

Day-02 (24.02.2021)

Program Schedule

11:00 - 11:03 am

Introductory Remarks : Dr. E Prasad, Co-ordinator, NSDC- 2021

11:04 - 11:08 am

Welcome Speech : Dr. Swapna S Nair, HoD, Dept. of Physics, CUK

11:09 - 11:15 am

Speaker Introduction : Prof. A.M Vinodkumar, HoD, Dept. of Physics,
University of Calicut

11:16 - 12:30 pm

Speaker : **Prof. S Kailas**, Former Director, Nuclear Physics Division,
BARC & INSA Senior Scientist

Topic: Nuclear Science, Technology and Society

Chair of the Session : Prof. Vincent Mathew

Meet link: meet.google.com/acs-fgng-vne



Coordinator: Dr. E Prasad

Organizing Committee:

Dr. Swapna S Nair

Dr. K J Thomas

Dr. Vincent Mathew

Dr. S C Sahoo

Dr. P M Aneesh &

Research Scholars



Prof. S Kailas

Nuclear Science, Technology and Society

S. Kailas.
BARC/UM-DAE CEBS, Mumbai

Sir C.V. Raman :
“Science is a fusion of man’s aesthetic and intellectual functions devoted to the representation of nature. It is therefore the highest form of creative art”.

“The essence of science is independent thinking, hard work, and not equipment. When I got my Nobel Prize, I had spent hardly 200 rupees on my equipment.”

Yesterday’s Science is Today’s Technology
True for Raman Effect



Grid of participant avatars including KM, V, S, and others.

Attendance for:

Class List

Date:

"2021-02-24" "Time:" "10:38" "Meet ID:" "acs-fgng-vne"

Names	"2021-02-24"	"Email"	"Commen ts"	"Arrival time"	"Last Seen"	"# of Checks"
Aadithia Mohanan	" ✓"	""	""	"10:55"	"12:46"	"34"
Abinaya Kamath	" ✓"	""	""	"11:00"	"12:46"	"57"
Ahammed Ali Naseef	" ✓"	""	""	"11:00"	"12:36"	"15"
Ajay Mohan K	" ✓"	""	""	"11:04"	"12:21"	"8"
Ajith Kumar	" ✓"	""	""	"10:52"	"12:46"	"99"
Akash Dominic Thomas	" ✓"	""	""	"10:58"	"10:58"	"1"
Akhila Gopinath	" ✓"	""	""	"11:04"	"11:06"	"3"
Amisha T	" ✓"	""	""	"12:02"	"12:06"	"5"
Anaghamrutha P V	" ✓"	""	""	"11:06"	"12:18"	"3"
Anees K T	" ✓"	""	""	"10:54"	"12:46"	"48"
Anjali T Vinod	" ✓"	""	""	"10:54"	"11:06"	"4"
Ardra Surendran Kp	" ✓"	""	""	"11:04"	"12:46"	"51"
Aseefa Azeez	" ✓"	""	""	"10:58"	"11:06"	"4"
Ashna B	" ✓"	""	""	"11:04"	"12:46"	"59"
Athira P S	" ✓"	""	""	"12:02"	"12:28"	"27"
Bhabani Sankar Sahoo	" ✓"	""	""	"10:53"	"11:45"	"40"
Department Of Physics	" ✓"	""	""	"10:38"	"12:46"	"32"
Dinesh Boda	" ✓"	""	""	"11:04"	"11:21"	"4"
Dr K P Santhosh	" ✓"	""	""	"10:55"	"12:46"	"98"
Dr Prasad E Nair Asst Prof Physics	" ✓"	""	""	"12:04"	"12:10"	"7"
Ganga R Nair	" ✓"	""	""	"12:17"	"12:46"	"30"
Gouri Panikkaveettil	" ✓"	""	""	"10:59"	"10:59"	"1"
Irene Joy Valiaveetil	" ✓"	""	""	"10:57"	"12:20"	"21"
Jyothish K	" ✓"	""	""	"12:17"	"12:19"	"3"
Kailas Swaminathan	" ✓"	""	""	"10:46"	"12:46"	"103"
Kailas Swaminathan	" ✓"	""	""	"10:46"	"10:46"	"1"
Kalarikad Thomas	" ✓"	""	""	"12:10"	"12:46"	"33"
Km Varier	" ✓"	""	""	"11:00"	"11:47"	"48"
Madduru Satya Babu	" ✓"	""	""	"11:09"	"11:09"	"1"
Manjunaath M K	" ✓"	""	""	"11:04"	"12:46"	"33"
Meghna C H	" ✓"	""	""	"10:45"	"10:54"	"3"
Nandana A B	" ✓"	""	""	"12:17"	"12:46"	"30"
Nandhakishor Klsry	" ✓"	""	""	"11:03"	"12:20"	"5"
Nimmy Sarah Alex	" ✓"	""	""	"11:04"	"12:45"	"31"
Nitheesh Praba	" ✓"	""	""	"11:04"	"11:06"	"3"
Parvathy M R	" ✓"	""	""	"12:21"	"12:45"	"23"
Pavan Kumar	" ✓"	""	""	"12:17"	"12:46"	"30"
Pinky K	" ✓"	""	""	"11:04"	"11:06"	"3"
Prasad Nair	" ✓"	""	""	"10:38"	"12:46"	"107"
Priyabrat Das	" ✓"	""	""	"12:17"	"12:35"	"19"
Rahul Murali	" ✓"	""	""	"11:19"	"12:46"	"31"

Rakesh S	" ✓ "	""	""	"12:17"	"12:44"	"28"
Ravi Sankar Babu Balabhadrapatruni	" ✓ "	""	""	"10:55"	"11:47"	"53"
Roshni Benny	" ✓ "	""	""	"11:04"	"12:46"	"46"
Ruksana	" ✓ "	""	""	"12:02"	"12:08"	"7"
Sabeel Pk	" ✓ "	""	""	"10:55"	"12:46"	"36"
Sahala Abdulla	" ✓ "	""	""	"10:58"	"12:32"	"37"
Sandeep K S	" ✓ "	""	""	"11:00"	"11:06"	"4"
Sangeetha Ck	" ✓ "	""	""	"10:59"	"12:46"	"49"
Shilna Kv	" ✓ "	""	""	"11:03"	"12:46"	"17"
Shiva Prasad Nayak	" ✓ "	""	""	"10:50"	"11:06"	"10"
Silpa Cs	" ✓ "	""	""	"10:58"	"12:46"	"90"
Sreejith V S	" ✓ "	""	""	"10:55"	"10:55"	"1"
Sreelakshmy T	" ✓ "	""	""	"12:17"	"12:46"	"30"
Sruthi C	" ✓ "	""	""	"10:59"	"12:28"	"72"
Subasa Cukerala	" ✓ "	""	""	"10:41"	"12:46"	"66"
Subir Nath	" ✓ "	""	""	"10:51"	"12:46"	"89"
Sudhansu Rayaguru	" ✓ "	""	""	"10:58"	"12:36"	"34"
Swapna Nair	" ✓ "	""	""	"10:54"	"11:07"	"14"
Vincent Mathew	" ✓ "	""	""	"10:53"	"12:46"	"103"
Visakh A C	" ✓ "	""	""	"12:17"	"12:45"	"29"
Yadukrishnan Yadu Pvr	" ✓ "	""	""	"12:17"	"12:46"	"30"
Zeenath	" ✓ "	""	""	"12:18"	"12:46"	"29"
Zeenath	" ✓ "	""	""	"10:56"	"11:06"	"4"

"Joined" "Details"
"2" "10:55 (4n 12:17 (30min) [12:46]
"3" "11:00 (4n 12:04 (43r 12:17 (10min) [12:26]
"3" "12:11 (6n 11:00 (4mi 12:32 (5min) [12:36]
"2" "12:17 (5n 11:04 (3min) [11:06]
"1"
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"2" "10:57 (43 10:54 (5min) [11:06]
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"2" "11:04 (29 12:17 (30min) [12:46]
"1"
"2" "11:07 (38 10:53 (2min) [10:54]
"3" "12:17 (30 12:02 (1mi 10:38 (1min) [10:38]
"2" "11:21 (1n 11:04 (3min) [11:06]
"1"
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"2" "10:50 (97 10:46 (6min) [10:51]
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"2" "10:45 (1n 10:53 (2min) [10:54]
"1"
"1"
"2" "12:15 (30 11:04 (1min) [11:04]
"1"
"2" "12:25 (21 12:21 (2min) [12:22]
"1"
"1"
"2" "12:10 (37 10:38 (70min) [11:47]
"1"
"2" "11:19 (1n 12:17 (30min) [12:46]

"1"
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"2" "12:04 (43 11:04 (3min) [11:06]
"1"
"2" "10:55 (6n 12:17 (30min) [12:46]
"2" "10:58 (21 12:17 (16min) [12:32]
"1"
"2" "12:02 (45 10:59 (4min) [11:06]
"2" "12:31 (16 11:03 (1min) [11:03]
"1"
"1"
"1"
"1"
"1"
"6" "12:07 (17 12:38 (7mi| 12:28 (8mi| 12:24 (4mi| 10:41 (28r 12:45 (2min) [12:46]
"1"
"2" "10:58 (14 12:17 (20min) [12:36]
"1"
"5" "12:10 (5n 12:02 (10r 12:23 (24r 10:53 (55r 12:15 (9min) [12:23]
"1"
"1"
"1"
"1"

00:58:53.459,00:58:56.459

KM Varier: Dr. Kailas, very nice presentation! 🍷

01:20:04.298,01:20:07.298

Prasad Nair: please leave your comments and feedback

01:20:16.479,01:20:19.479

Prasad Nair: students in particular

01:22:30.847,01:22:33.847

Ganga R Nair: The talk was really interesting, got to know some new perspectives. Thanks a lot for organising the webinar!

01:26:41.824,01:26:44.824

Sreelakshmy T: Presentation was so interesting and also was able to understand different interesting applications .Thanks 👍

01:36:55.278,01:36:58.278

Nimmy Sarah Alex: Great talk that covered many aspects. The discussion session was also interesting.Thanks.

01:37:05.414,01:37:08.414

Anees K T: Thank you sir for the wonderful talk.

01:38:36.127,01:38:39.127

ARDRA SURENDRAN KP: Great presentation Sir. Thank you

01:41:10.041,01:41:13.041

SILPA CS: Thank u sir for great presentation and improvising our knowledge.

National Science Day celebration 2021

Day 2: 24-02-2021, Wednesday

Speaker: Prof. S. Kailas, Former Director, Physics Division, BARC & INSA Senior Scientist

Topic: Nuclear Science, technology and Society

Time: 11.00 AM to 1 PM

Dr Prasad welcomed the audience Dr. Swapna S Nair, Head, Department of Physics, CUK introduced the speaker.

Prof. Vincent Mathew chaired the session.

Dr S Kailas talked about the developments in Nuclear Science and its various applications in all fields of science. He emphasized that today's science is tomorrow's technology. He took the participants to various fields where technology from nuclear science is crucial. He also opined that the attitude of the common man towards nuclear science and nuclear technology must change. Nuclear power is one of the cleanest energy sources available and a positive approach is highly necessary to properly tap this possibility to use for the benefit of common man.

Prof Vincent Mathew moderated the interaction session and concluded the talk by proposing vote of thanks. More than 60 participants attended the webinar.

National Science Day Celebration 2021 (NSDC 2021)



Department of Physics
Central University of Kerala



National Webinar Series

Day-03 (25.02.2021)

Program Schedule

11:00 - 11:03 am

Introductory Remarks : Dr. E Prasad, Co-ordinator, NSDC- 2021

11:04 - 11:08 am

Welcome Speech : Dr. Swapna S Nair, HoD, Dept. of Physics, CUK

11:09 - 11:15 am

Speaker Introduction : Dr. Rhine Kumar, Assistant Professor, CUSAT

11:16 - 12:30 pm

Speaker : **Dr. Charles Jose**, Assistant Professor, CUSAT

Topic: Probing the Universe with Galaxies

Chair of the Session : Dr. S C Sahoo

Meet link : <https://meet.google.com/xys-ncdg-tix>



Coordinator: Dr. E Prasad

Organizing Committee:

Dr. Swapna S Nair

Dr. K J Thomas

Dr. Vincent Mathew

Dr. S C Sahoo

Dr. P M Aneesh &
Research Scholars



Dr. Charles Jose

REC Charles Jose is presenting

Meet - xys-ncdg-tix - Google Chrome

meet.google.com/xys-ncdg-tix

REC You are presenting

You're presenting to everyone

Stop presenting

Meeting details

People (47) Chat

Meeting participants:

- You
- sathasa CuKerala
- Swapna Nair
- Prasad Nair
- Rhine Kumar Arayakkandi Kee...
- AJAY MOHAN K
- KM Varier
- Yadukrishnan Yadu Pvr
- Dr KJ Thomas Prof Physics

meet.google.com is sharing your screen. Stop sharing Hide

Meeting controls: Raise hand, You are presenting

National Webinar: Probing the Uni... X

People (47) Chat

Add people Host controls

IN CALL

Class List

Physics Department of Ph... (You) 47 of 67

Enter any notes specific to this class.

- Aadithia Mohanan
- Sahala Abdulla
- Nimmy Sarah Alex
- Abinaya Kamath
- Ashna
- Ahammed ali Naseef
- Ravi Sankar Babu Balabhadrapatruni
- AJAY MOHAN K
- Sreethi C
- Shi Chaurasia
- AKASH DOMINIC THO
- Sangeetha CK

Charles Jose is presenting

eScan Anti-Virus (AV) Edition for SMB

System is fully patched with Critical Updates.

REC Charles Jose is presenting

Meet - xys-ncdg-tix - Google Chrome

You are presenting

You're presenting to everyone

Stop presenting

Meeting details

- People (24)
- Chat
- Prasad Nair 12:34: feedback please students
- AKASH DOMINIC THOMAS 12:34: The talk was thought provoking, interactive and great introduction to cosmology. Thankyou sir!
- Sruthi C 12:35: It was more interactive and an excellent talk. Thank you sir
- Abinaya Kamath 12:35: thankyou sir for the interesting presentation
- SANGEETHA CK 12:38: The talk was really informative. Thank you sir!
- Nimmy Sarah Alex 12:38: Thanks for introducing us to the cosmology studies. Well planned, amiable talk. Thankyou sir!
- ARDRA SURENDRAN KP 12:40: Really informative and excellent talk. Thank you Sir

Send a message to everyone

Meeting details

meet.google.com is sharing your screen. Stop sharing Hide

Raise hand You are presenting

National Webinar: Probing the Uni... X

People (24) Chat

Add people Host controls

IN CALL

Class List 52 of 71 31 19 4 Start: 11:36 Duration: 73

Enter any notes specific to this class.

- ✓ Ajay Mohan K
- ✓ Manjunaath M K
- ✓ Pinky K
- ✓ Abinaya Ka
- ✓ Rhine Kuma
- ✓ Ardra Surendran Kp
- ✓ Pavan Kumar
- Shilna Kv
- ✓ Aadithia Mohanan
- ✓ Emv Mons

Arrived: 11:36 Last Seen: 11:47

Google Meet Attendance - v1.4.3

National Webinar: Probing the Univ... ^

🔒 🔇 📞 🗑️ ✓

Raise hand



Dr KJ Thomas Prof Physics

pavan kumar has left the meeting

Meeting controls: Lock, Mute (red), Unmute, End call, Stop video (red), Checkmark, Raise hand

National Webinar: Probing the Uni...

People (8) Chat

Add people Host controls

IN CALL

- Class List
- Physics Department of Ph... (You)
- Ahammed ali Naseef
- Ajay Mohan K
- Anees K T
- Pinky K
- Abhinaya Kamath
- Dr KJ Thomas Prof Phys...
- Ardra Surendran Kp
- Shilna Kv
- Ashia Mohanan

Turn on captions Present now

Google Meet Attendance - v1.4.3

Day - 3

Names (0 Absent)	10:50	10:55	11:00	11:05	11:08
Sahala Abdulla Nimmy Sarah Alex Anaswararamakrishnan Anu Ashna					
Ashna B Ravi Sankar Babu Balabha... Roshni Benny Sruthi C Sangeetha Ck					
Silpa Cs Silpa Cs Aneeshpm Cukerala Subasa Cukerala Priyabrat Das					
Akhila Gopinath					
Meghna C H Meghna C H Charles Jose Charles Jose					
Anju Joseph Ajay Mohan K Pinky K Abinaya Kamath Rhine Kumar Arayakkandi ...					
Ardra Surendran Kp Pavan Kumar Aadithia Mohanan Prasad Nair Prasad Nair					
Ahammed Ali Naseef Shiva Prasad Nayak Gouri Panikkaveettil Gouri Panikkaveettil Department Of Physics					
Dr Kj Thomas Prof Physics Aswathi Pk Sabeel Pk Sabeel Pk Nitheesh Praba					
Yadukrishnan Yadu Pvr Parvathy M R Ruksana Rakesh S Sreejith V S Sreejith V S					
Bhabani Sankar Sahoo Aadithya Suresh Amisha T Anees K T					
Anees K T Sreelakshmy T Akash Dominic Thomas Anaghamrutha P V Km Varier					

00:31:46.959,00:31:49.959

Yadukrishnan Yadu Pvr: No

00:31:58.731,00:32:01.731

amisha t: Random distribution

00:32:01.962,00:32:04.962

AJAY MOHAN K: Non homogeneous

00:32:20.628,00:32:23.628

Nimmy Sarah Alex: Non-uniform distribution

00:36:11.578,00:36:14.578

Yadukrishnan Yadu Pvr: Standard deviation?

00:36:12.682,00:36:15.682

Gouri Panikkaveettil: mean deviation

00:38:41.973,00:38:44.973

Sandeep K S: 0?

00:38:47.443,00:38:50.443

amisha t: 0

00:41:44.959,00:41:47.959

Nimmy Sarah Alex: yes

00:41:46.855,00:41:49.855

Sandeep K S: Yes

00:43:04.742,00:43:07.742

Gouri Panikkaveettil: check

00:43:26.580,00:43:29.580

Gouri Panikkaveettil: check if std deviation is 0 or not

00:43:28.060,00:43:31.060

Sandeep K S: Taking standard deviations?

01:25:12.575,01:25:15.575

Prasad Nair: feedback please students

01:25:24.583,01:25:27.583

AKASH DOMINIC THOMAS: The talk was thought provoking , interactive and great introduction to cosmology.Thankyou sir!!

01:26:11.911,01:26:14.911

Sruthi C: It was more interactive and an excellent talk. Thank you sir

01:26:28.261,01:26:31.261

Abinaya Kamath: thankyou sir for the interesting presentation

01:28:46.218,01:28:49.218

SANGEETHA CK: The talk was really informative. Thank you sir!

01:29:26.237,01:29:29.237

Nimmy Sarah Alex: Thanks for introducing us to the cosmology studies.
Well planned, amiable talk. Thankyou sir!

01:30:41.246,01:30:44.246

ARDRA SURENDRAN KP: Really informative and excellent talk .Thank you
Sir

01:37:32.020,01:37:35.020

Gouri Panikkaveettil: It was a really great leacture explained
everything in simple terms so could understand very well

National Science Day celebration 2021

Day 3: 25-02-2021, Thursday

Speaker: Dr Charles Jose, Assistant Professor, CUSAT, Cochin

Topic: probing the Universe with galaxies

Time: 11.00 AM to 1 PM

Dr Prasad welcomed the audience. Dr Rhine Kumar, Assistant Professor, CUSAT introduced the speaker

Dr. Subasa Chandra Sahoo chaired the session.

Dr Charles Jose introduced the topic well. He talked about the galaxies, observational aspects, expansion of galaxies and also detailed the information gained from “first light” – the cosmic microwave background radiation. The talk was very informative.

Dr Sahoo moderated the interaction session and concluded the talk by proposing vote of thanks. More than 60 participants attended the webinar.

National Science Day Celebration 2021 (NSDC 2021)



Department of Physics
Central University of Kerala



National Webinar Series

Day-04 (26.02.2021)

Program Schedule

11:00 - 11:03 am

Introductory Remarks : Dr. E Prasad, Co-ordinator, NSDC- 2021

11:04 - 11:08 am

Welcome Speech & Speaker Introduction : Dr. Swapna S Nair, HoD, Dept. of Physics, CUK

11:09 - 12:30 pm

Speaker : Dr. Manju Perumbil, Australian National University

Topic: Tunneling Dynamics of a Bose Einstein Condensate

Chair of the Session : Dr. Aneesh P M

Meet link : meet.google.com/gob-hidh-dus



Coordinator: Dr. E Prasad

Organizing Committee:

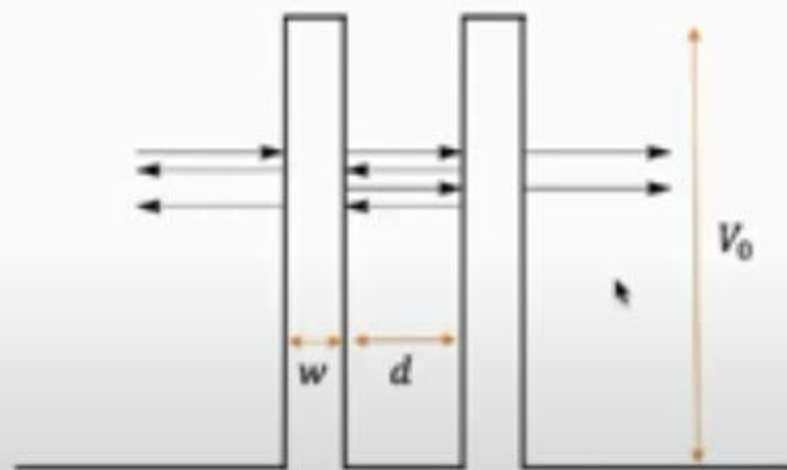
Dr. Swapna S Nair
Dr. K J Thomas
Dr. Vincent Mathew
Dr. S C Sahoo
Dr. P M Aneesh &
Research Scholars



Dr. Manju Perumbil

Atomic Fabry-Perot Interferometer

- Light is replaced by atoms
- Mirrors are replaced by optical potentials

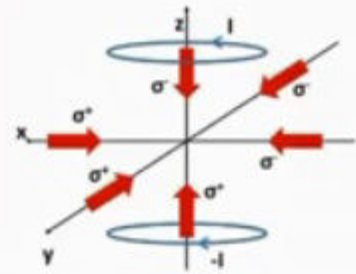


Differences from optical system:

- Atomic mass
- Interaction between atoms (tunable)
- Optical potentials behave differently to ordinary mirrors (reflectivity is no longer a constant)



Laser Cooling & Polarisation Gradient Cooling



1997 Nobel prize in Physics:
Steven Chu, Claude Cohen
Tannoudji and William D.
Phillips

$$T \propto v^2$$

- Atoms only absorb specific energies/frequencies
- Photons have momentum : light can apply force if absorbed
- Atoms slow down after collision and absorption: momentum conservation
- Excited atom re-emits in random directions, hence do not cancel the initial pushing force
- Counter propagating red detuned beams: forms spatially varying polarization vector for PGC



Subha A																				
Sahala Abdulla																				
Nimmy Sarah Alex																				
Anaswararamakrishnan Anu																				
Ashna																				
Ashna B																				
Nandana A B																				
Ravi Sankar Babu Balabha...																				
Roshni Benny																				
Sruthi C																				
Rishi Chaurasia																				
Shameer Chemistry																				
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Subasa Cukerala																				
Priyabrat Das																				
Akhila Gopinath																				
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Raj Kishor C H																				
Amala Jose																				
Charles Jose																				
Charles Jose																				
Anju Joseph																				
Ajay Mohan K																				
Manjunaath M K																				
Pinky K																				
Abinaya Kamath																				
Rhine Kumar Arayakkandi ...																				
Ardra Surendran Kp																				
Pavan Kumar																				
Shilna Kv																				
Aadithia Mohanan																				
Emy Mons																				
Rahul Murali																				
Adithya S Nair																				
Prasad Nair																				
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Swapna Nair																				
Ahammed Ali Naseef																				
Shiva Prasad Nayak																				
Gouri Panikkaveettil																				
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Department Of Physics																				
Dr KJ Thomas Prof Physics																				
Aswathi Pk																				
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Nitheesh Praba																				
Yadukrishnan Yadu Pvr																				
Parvathy M R																				
Ruksana																				
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Sandeep K S																				
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Bhabani Sankar Sahoo																				
Nirmala Maria D Souza																				
Aadithya Suresh																				
Kailas Swaminathan																				
Amisha T																				
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Akash Dominic Thomas																				
Anaghamrutha P V																				
Km Varier																				
Varun Yadu																				
Zeenath																				

Day 4 (71)

National Science Day celebration 2021

Day 4: 26-02-2021, Friday

Speaker: Dr Manju Perumbil, Australian National University

Topic: Tunnelling dynamics of a Bose-Einstein condensate

Time: 11.00 AM to 1 PM

Dr Prasad welcomed the audience. Dr Swapna S Nair introduced the speaker to the participants.

Dr. Aneesh P M chaired the session.

Dr Manju Perumbil in this talk talked about the BE, Bose Einstein condensate, how it is realised in the laboratory and different applications of BEC in day to day life. She explained how significant is the tunnelling dynamics in Fabry Perot interferometer and explained the dynamics using single and double barriers. Also discussed about Fisher information and the practical feasibility of the findings.

Dr Aneesh moderated the interaction session and concluded the talk by proposing vote of thanks. More than 60 participants attended the webinar.

Dr E Prasad made the concluding remarks.