



Subject Talk

Prof. Pramod Kumar Maurya Senior Scientist, Division of Marine Instrumentation, National Institute of Oceanography, Panaji, delivered a talk On "Interplay between robotics and marine science on September 23, 2017.



In his talk he stressed on the importance of study and research of oceanography and how the new technology could be used to sustain ocean productivity and fisheries. He also mentioned the role of robotics to explore the oceans at a larger scale which cannot be accessed by humans. In his concluding remarks he mentioned about the scope and opportunities in this field of research. The talk was attended by the faculty of the Physics department and Fifty students from First, Second and Third year B. Sc. Physics.

WorkshopCont from Page1

Forty students participated in this workshop to avail the benefit, which is a motivating factor to conduct more such workshops. The workshop was coordinated by Mrs. Malati Dessai.



T. Y. B. Sc. students of department of Physics attended a one day workshop on Experimental Physics held at St. Xavier's college of Arts and Science, Mapusa, Goa. The resource person was Prof. Marwah of Chandigarh University, Punjab. His focus was to take physics out of the classroom and motivate the fraternity to take interest in the subject to understand the world better. He explained various concepts of physics with fun filled and energetic manner.

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Workshop on "Introduction to Numerical Techniques and Python Programming"

One day interdisciplinary Workshop on "Introduction to Numerical Techniques and Python Programming" was organised by department of Physics on Wednesday, 4th October 2017.

Morning session was devoted to learning the Numerical Methods required to find the approximate solutions to ordinary differential equations. The Resource Person for this session was Mr.Rovan Vaz of Department of Mathematics, Chowgule College, Margao, Goa.

Evening session was devoted to learning the basics of Python programming language such as syntax and concepts which included variables, conditionals and loops. Resource Person was Mr.Wendham Gray of Department of Computer Science, Chowgule College, Margao, Goa.

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Student Representation

Einstein Floyd Gomes represented college band for the event 'Plexus' organized by Goa Medical college and secured first place.

T.Y.B.Sc. ongoing Projects

- 1) Study of Dielectric Material: Akanksha Dwivedi, Sheweta Tiwari, Anupurna Meti and Estella Fernandes.
- 2) Computational Quantum Mechanics: Vijay Peddasingh, Amrita Sarkar, Radhika Bandekar.
- 3) Locking out the offset using DC Differential Amplifier. Akash Kundaiker, Einstein Floyd Gomes, Aslob Menezes, Ruvell Colaco
- 4) The Revolution of the Moons of Jupiter: Ceena, Elain, Avney, Ninoshka
- 5) Study of fractals and Self Similar patterns: Sandeep Reswal.

Get together

T.Y.B.Sc. Physics students organized a get together for the students and staff of department of Physics. It was a fun and energetic evening filled with joy which concluded with season's greeting.

NGPE Exam Announcement

Last date for enrolment to National Graduate Physics Examination Conducted by IAPT, is **17th November 2017**.

Eligibility: Students of B.Sc. I,II, III
Registration Fee: ₹ 100.

Format of NGPE:

25 MCQ's with any number of options may be correct
Ten short answer questions 5 Marks each
Ten Problems 10 Marks each.

Physics Quote

"Anyone who has never made a mistake has never tried anything new."
— [Albert Einstein](#)

The Nobel Prize in Physics 2017

The Nobel Prize in Physics 2017 was divided, one half awarded to Rainer Weiss, the other half jointly to Barry C. Barish and Kip S. Thorne "for decisive contributions to the LIGO detector and the observation of gravitational waves".



Rainer Weiss
Prize share: 1/2



Barry C. Barish
Prize share: 1/4



Kip S. Thorne
Prize share: 1/4

Excerpt: Our knowledge and understanding of the Universe is based on millennia of observations of the quanta of electromagnetic radiation – photons – in a wide range of wavelengths. These studies have taught us a lot – not only about planets, stars and galaxies but also about the origins of structure, the evolution and possibly the fate of the Universe. It turns out, however, that highly energetic photons do not reach us from the furthest recesses of the cosmos. So, during the past few decades, new kinds of telescopes have been developed, leading to unexpected breakthroughs. These detectors exploit other forms of radiation: cosmic rays, neutrinos and gravitational waves. The existence of gravitational radiation is linked to the general theory of relativity and was predicted by Einstein a century ago [1, 2]. Gravitational waves are travelling ripples in space-time. They arise when heavy objects accelerate and hence generate disturbances in the gravitational fields. These distortions, described as waves, move outward from the source at the speed of light and give rise to effects that, in principle, are measurable when they reach Earth given sufficiently sensitive detectors. The effects are minuscule, even in the case of black holes spiralling ever closer to each other or exploding stars.

https://www.nobelprize.org/nobel_prizes/physics/laureates/2017