



# GOVERNMENT COLLEGE, MADAPPALLY

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## DEPARTMENT OF PHYSICS

## PATHWAYS *in* PHYSICS

*Webinar Series by the Physics Alumni*



### *20 Weeks with Physics Alumni*

Department of Physics in collaboration with IQAC, Govt. College Madappally will be conducting a series of talks introducing some current research areas in physics. Our alumni, working in premiere institutes in India and abroad, will be presenting their areas of research in a way accessible to the physics community of students and teachers. The weekly seminars will be mostly on Thursdays, starting from 16<sup>th</sup> September 2020. The platform will be Google Meet and the recorded version of the talk will be made available to the public. We welcome the students and teachers to explore the new pathways of research in physics.

Dr. Udayakumar O K  
Principal

Dr. Harikrishnan G  
Coordinator






Dr. Suneera T P  
HOD, Physics

## WEBINARS

1	<b>Inaugural Programme</b>	<b>Dr. Nijil Lal C. K.</b> Postdoctoral Fellow, Physical Research Laboratory, Ahmedabad & <b>Mr. Jishnu Sai P.</b> Research Scholar, IISc-Bangalore	<b>Towards a Career in Physics</b>  16 September 2020 2:30 pm
2		<b>Dr. Anjusha V. S.</b> Postdoctoral Fellow, Institute for Quantum Optics, Ulm University, Germany  Area : Experimental Quantum Optics	<b>NV Based Quantum Sensors</b>  24 September 2020 2.30 pm
3		<b>Dr. Sudheesh Chethil</b> Associate Professor, IIST-Thiruvananthapuram  Areas : Quantum Information, Quantum Optics, Nonlinear Dynamics	<b>Nonlinear Dynamics of Quantum Systems</b>  1 October 2020 2.30 pm
4		<b>Dr. Nijil Lal C. K.</b> Postdoctoral Fellow, Physical Research Laboratory, Ahmedabad  Area : Experimental Quantum Optics	<b>Twisted Photons and Their Applications</b>  8 October 2020 2.30 pm
5		<b>Dr. Raghunath Chelakkot</b> Assistant Professor, IIT-Bombay  Area : Active Matter	<b>Nature and Nonequilibrium Physics : Finding Physical Explanations for Biological Phenomena</b>  15 October 2020 2.30 pm

6		<p><b>Dr. Roshin Raj Sheeba</b> Postdoctoral Fellow, Aix-Marseille University, France</p>	<p><b>Plasma Physics and Fusion Science</b></p>
		<p>Area : Plasma Spectroscopy</p>	<p>22 October 2020 11am</p>
7		<p><b>Dr. Suchand Sangeeth C. S.</b> Assistant Professor, NIT-Calicut</p>	<p><b>Molecular Electronic Plasmonics</b></p>
		<p>Area : Organic and Molecular Electronics</p>	<p>28 October 2020 2.30 pm</p>
8		<p><b>Dr. Sreeparvathy P. C.</b> Postdoctoral Fellow, IIT-Bombay</p>	<p><b>First Principles Investigation of Thermoelectric Materials</b></p>
		<p>Area : Computational Condensed Matter</p>	<p>4 November 2020 2.30 pm</p>
9		<p><b>Dr. Jayakumar Balakrishnan</b> Assistant Professor, IIT-Palakkad</p>	<p><b>Reduced Graphene Oxide Synthesis and Its Applications</b></p>
		<p>Area : Experimental Condensed Matter</p>	<p>12 November 2020 2.30 pm</p>
10		<p><b>Dr. Vaisakh V.</b> Postdoctoral Fellow, University of Alberta, Canada</p>	<p><b>Cryo-free Dilution Fridges</b></p>
		<p>Area : Low Temperature Physics</p>	<p>19 November 2020 11am</p>

11		<p><b>Dr. Ananya Gangadharan</b>          Director of Energy Technology (R&amp;D), GODI          India Pvt. Ltd.</p> <p>Area : Batteries and Super-capacitors</p>	<p><b>Opportunity in Energy Technology Field for Physicists</b></p> <p>26 November 2020          2.30 pm</p>
12		<p><b>Dr. Arjun Unnikrishnan</b>          Postdoctoral Fellow,          IIT-Bombay</p> <p>Area : Magnetism and Magnetic Materials</p>	<p><b>Low-dimensional Low-spin Systems with Novel Magnetic Ground States</b></p> <p>3 December 2020          2.30 pm</p>
13		<p><b>Dr. Rathul Nath Raveendran</b>          Postdoctoral Fellow,          Sungkyunkwan University,          South Korea</p> <p>Area : Cosmology</p>	<p><b>The Early Universe: Did the Universe Bang or Bounce ?</b></p> <p>10 December 2020          2.30 pm</p>
14		<p><b>Dr. Reshmi Varma P C</b>          PhD from          IISER-Thiruvananthapuram</p> <p>Area : Organic Photovoltaics</p>	<p><b>Introduction to Organic Solar Cell</b></p> <p>17 December 2020          2.30 pm</p>
15		<p><b>Mr. Mithun K P</b>          Research Scholar,          IISc-Bangalore</p> <p>Area : Ultrafast Spectroscopy</p>	<p><b>Time Resolved Ultrafast Spectroscopy</b></p> <p>31 December 2020          2.30 pm</p>

16		<p><b>Dr. Jishnu Suresh</b>  Postdoctoral Fellow,  KAGRA Observatory  Institute for Cosmic Ray Research (ICRR),  University of Tokyo</p>	<p><b>Gravitational Waves : Murmur from the Dark Universe</b></p> <p>7 January 2021  2.30 pm</p>
Area : Gravitational Waves			
17		<p><b>Dr. Fairoos C.</b>  PhD from  IIT-Gandhinagar</p> <p>Area : Quantum Field Theories in Curved  Space-Time</p>	<p><b>Thermodynamics of Black Holes</b></p> <p>14 January 2021  2.30 pm</p>
18		<p><b>Mr. Jishnu Sai P.</b>  Research Scholar,  IISc-Bangalore</p> <p>Area : Theoretical Cosmology</p>	<p><b>Primordial Non-Gaussianity</b></p> <p>21 January 2021  2.30 pm</p>
19		<p><b>Dr. Krishnendu N. V.</b>  Postdoctoral Fellow,  Max Planck Institute for Gravitational Physics  (AEI), Hannover, Germany</p> <p>Area : Gravitational-wave Data Analysis,  Blackhole Physics, Gravitational-wave Source  Modeling</p>	<p><b>Testing the Binary Black Hole Nature of a Compact Binary  Coalescence</b></p> <p>28 January 2021  2.30 pm</p>
20		<p><b>Dr. Suchand Sandeep C. S.</b>  Postdoctoral Fellow,  Nanyang Technological University, Singapore.</p> <p>Area : Ultrafast Phenomenon, Photonics,  Biomedical Optics</p>	<p><b>Current Trends in Ophthalmic Imaging</b></p> <p>4 February 2021  2.30 pm</p>