

# FIZIKA Understand, Apply Achieve. Information Brochure

fizika.gramoly.org

# FIZIKA

# Understand, Apply, Achieve.

# Stage I

### Round I

04-Sep-2021 18:30 UTC to 18:29] UTC next day

05-Sep-2021

[00:00, 23:59] IST

Open to All!

Click here to convert timings

### Round II

11-Sep-2021 1830 UTC to 1829 UTC next day

12-Sep-2021 [0000, 2359] IST Open to All!

Click here to convert timings

# Stage II

ROUND III
Tentatively MidJanuary Details to
be announced
soon

FIZIKA is a 3-round based free annual competition meant for individuals at any stage that consists of the creative application of high school physics concepts. We aim to introduce learners to some unconventional applications of theory, hone up their problem-solving aptitude and expand their critical thinking, which in turn will make them better problem solvers. Furthermore, We love sharing exciting some problems with learners.

Spanning across 2 rounds taking place on consecutive Sundays [5 Sep, 12 Sep] Stage I of FIZIKA is open to all. An aggregate score from these rounds will be considered according to

 $[R_1+9R_2]/10$ 

The top 50 available candidates, based on their scores, shall qualify for Stage-II. In case of a tie, preference will be given by hidden tiebreakers.

### Round I

30 Minutes

(+2, 0, 0)

Part A

5 Questions

Integer Answers [0, 9]

Part B

5 Questions

Multiple Choice Multiple Correct

Questions

\$7 Complementary Prize to all participants of round 1 who appear for Round II

### Round II

60 Minutes

(+2, 0, 0)

Part A

8 Questions

Integer Answers [0, 9]

Part B

8 Questions

Multiple Choice Multiple Correct

Questions

Prizes worth 66\$ to Top 200

of Round II

# Organized by

### **GRAMOLY**

GRAMOLY is a non-profit organization, rather, a vision, which seeks to bring about a change in the way STEM subjects are imparted to the general public. We wish to build up a community that will rally for this cause and ultimately is one of the mediums through which STEM education is revolutionized around the globe. From exceptional lectures, hand-outs to seminars, and excellent quality content, we will provide it all, free of cost, to everyone.

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**GRAMOLY** 

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# Powered by

### **INSP**

Indian School of Physics, run by Nitin Sachan sir (an IIT-Madras Alum, a top-notch physics teacher and a passionate physics lover), makes intriguing physics videos focusing on challenging problems and creative solutions. He also makes videos on topics which is generally not taught in school but are helpful in problem-solving. His videos are beneficial for students preparing for competitive exams and olympiads or problem-solving enthusiasts in general.

Indian School Of Physics



# Physics SirJEE

Physics Sir JEE run by Janardanudu Thallaparthi also known as Janardhan sir (an AIR-251 in JEE, an IIT-M alum, and a passionate physics teacher for the past 14 years) makes videos on intriguing physics challenges and concepts for pre-college students which is highly beneficial for students appearing in JEE or Physics olympiads.

Physics Sir JEE Janardhan



**Physics Sir JEE** 



PhysicsSirJee.in

# Problem Proposers

Aditya **AKIII** Atharva Nilesh Mahajan Atharv Shivram Mahajan Harshit Gupta Hemansh Shah Janardanudu Thallaparthi Muhamed Yaseen Nimarjeet Bajwa Nitin Sachan Samar Yadav

# Contributors

Aayush Anand Aditya Singh Arhaan Ahmad Badal Panchani Yash Bughani

Tarpan Ghosh

# Registration

Register for Fizika

@fizika.gramoly.org/contest

Registrations are Open till 30th August

# **Eligibility**

This is an open Physics Challenge for everyone

Anyone from Middle school to a retired professor can participate

### Category A:

for 1st year of undergraduate student and below

### Category B:

Open for anyone (including A category students if they want to compete in the open pool)

However only A category Particpants are eligible for the prizes

# Sample Problems

<u>Sample Problem 1 by Indian School of Physics</u> <u>Sample Problem 2 by Physics Sir JEE Janardhan</u>

# Sponsors



# Art of Problem Solving

Art of Problem Solving is a creative problem solving community filled with challenging problems that require creativity and persistence to solve. Art of Problem Solving offers a wide variety of free resources for avid problem solvers, including hundreds of videos and interactive tools like Alcumus, a popular adaptive learning system. Also, AoPS Online community forums are the place for creative problem solvers to connect, question and collaborate. They have a forum for each level and category.

artofproblemsolving.com



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mathcha.com



# Replit

Replit is a simple yet powerful online IDE, Editor, Compiler, Interpreter, and REPL. Code, compile, run, and host in 50+ programming languages.

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### Overleaf

Overleaf is a startup and social enterprise that builds modern collaborative authoring tools for scientists — like Google Docs for Science. Our primary product is an online, real time collaborative editor for papers, theses, technical reports and other documents written in the LaTeX markup language.



overleaf.com



# PhysOlymp

Theory, examples and challenging problems organized by topics, which would be useful for preparation to Physics competitions and advanced exams

PhysOlymp.com

# **Prizes**

### Round I

Gift worth 7\$ to all participants of Round I attempting Round II

## Round II

Prizes worth 120\$ to top 200 participants of Round II

### Round III

Top 3 | 180+48+25\$/- Each

Top 10 180+48\$/- Each

Top 50 48\$/- Each

# Certificates to all participants