



## International Physics & Culture O L Y M P I A D

Federal Institute of Paraná  
Curitiba, Brazil  
[curitiba.ifpr.edu.br](http://curitiba.ifpr.edu.br)

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**Dear Principal**

Ref.: INVITATION TO PARTICIPATE

**4<sup>th</sup> INTERNATIONAL PHYSICS AND CULTURE OLYMPIAD**

The Federal Institute of Paraná - Campus Curitiba would like to invite you and your school to participate in the 4<sup>th</sup> INTERNATIONAL PHYSICS AND CULTURE OLYMPIAD (4<sup>th</sup> IPhCO) which will be held in November 2020.

The IPhCO is an online physics competition for high-school students from Brazil and abroad, invited to participate. The questions and challenges seek to arouse the student's interest in Physics, Math, Chemistry, Biology, History, Arts, among others, but always with the main focus on Physics. It is a multidisciplinary project.

Enrollment increases every year because of the unique characteristics of this competition, where students participating have more freedom and fun. At the end of the competition, students often write to us to praise the Olympics and thank us. We feel very happy with these testimonials...

*"In the end, I would like to thank you for all the experience that was provided, I discovered many new things and I gained a lot of desire to travel to all the places indicated, I look forward to IPhCO in November. Thanks for everything!" A student in a small city named Carvalhópolis in Brazil.*

*"Thanks for every question, wonderful Olympics!" A student of the Federal Institute of Mato Grosso, Brazil*

Every year, we think about how to improve this online Olympiad. IPhCO is a small project, done with love, by a group of dreamy teachers that care about their students.

There is no compulsory minimum or maximum number of students per school. At the end teachers and students will receive a certificate of participation and students will be awarded with collectible postcards sent from Brazil. For more information, please, see the Regulation of the 4th IPhCO attached at the end of this invitation letter.

The 4<sup>th</sup> IPhCO will begin on Wednesday, November 4<sup>th</sup>, 2020. Schools interested in participating will be requested to fill out a form until October 25.

Link to the IPhCO webpage: <https://www.iphco-ifpr.curitiba.br/>

Link to a sample of IPhCO Questions: <https://www.iphco-ifpr.curitiba.br/open-portal>

Link to the School Form and Student Form: <https://www.iphco-ifpr.curitiba.br/registration/>

We strongly recommend that the participation of the students be optional, but we believe some encouragement might improve participation rates. In our experience, students generally love this new form of competition and we hope that, the enthusiasm generated by IPhCO will improve participation of students in traditional Olympiads.

For more information about us, please visit the following links:

<http://curitiba.ifpr.edu.br/2017/11/16/iphco-campus-curitiba-e-google-street-view-ajudando-a-divulgar-curitiba-e-parana/>

<https://www.gazetadopovo.com.br/haus/estilo-cultura/projeto-inedito-promove-tour-a-museus-curitibanos-pelo-google-street-view/>

[http://www.sinepepr.org.br/sinepe\\_on\\_line/2018/abril/11\\_04\\_2018\\_leia\\_mais\\_educacao.pdf](http://www.sinepepr.org.br/sinepe_on_line/2018/abril/11_04_2018_leia_mais_educacao.pdf)

And for further information about the upcoming event do not hesitate to contact us: iphco@ifpr.edu.br.  
Phone number: 55-41-988293347. We are looking forward to your participation!

*Jânia Duha*

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**IPhCO Coordinator**

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## REGULATION OF THE 4<sup>th</sup> INTERNATIONAL PHYSICS & CULTURE OLYMPIAD 4<sup>th</sup> IPhCO – 2020

**1. ABOUT IPhCO.** IPhCO is held annually by the Organization Team of the Event.

**2. ABOUT THE BASIC TASKS OF IPhCO REPRESENTATIVE TEACHERS.** The basic tasks of the teachers representing IPhCO are:

- Advertise IPhCO at your school and encourage students to participate;
- Make a list with the name and email address of the students who wish to participate;
- Fill out the online form with the requested data, thus ensuring your school's enrollment in the Olympiad (<https://www.iphco-ifpr.curitiba.br/registration>);
- Contact the organization committee of IPhCO if any changes of student's information previously sent are necessary ([iphco@ifpr.edu.br](mailto:iphco@ifpr.edu.br));
- Check your student's progress during the two weeks of the Olympiad and encourage them to solve problems without the help of their colleagues and with emphasis on individual learning and autonomy;
- Let students know of any updates and messages. Passwords will be sent, by IPhCO, to the teacher always around noon - twelve hours before the opening of each portal.

**3. ABOUT THE TEST.** The test, usually, consists of 10 questions, however, this year, exceptionally it will consist of 7 questions, which will be available during the period from 4 to 14 November, according to the schedule below:

Schedule				
Year	Month	Day	Question	
2020	November	04	Q1	wed
		05	Q2	thu
		06	Q3	fri
		11	Q4	wed
		12	Q5	thu
		13	Q6	fri
		14	Q7	sat

w1 - week 1: November 04 - 06; w2 - week 2: November 11 – 14.

The questions cover content taught during the three years of the typical Brazilian high school, ranging from easy to medium level. They are accompanied by explanations and hints that aim at helping students of the first years who will naturally have to make an extra effort to solve the problems.

**4. ABOUT THE PARTICIPANTS.** All high-school students regularly enrolled in educational institutions in Brazil and abroad can participate. There is no restriction on the minimum or maximum number of students participating per school.

**5. ABOUT THE LOCATION.** Questions are available online on the Olympiad webpage. As long as the student has access to the internet, he can attend the Olympiad everywhere. However, many students can't afford to connect to the internet at home. These students will need access to school computers.

**6. ABOUT THE CONTENTS OF THE QUESTIONS.** The questions will be compatible with the content covered by most high-school textbooks and it is expected that the students will be able to solve all questions easily if they read the hints and briefly research the subject on the internet. However, to solve a question the student will need to solve math puzzles, visit museums, hike a mountain, visit a haunted house, and so on, to find the clues to the data he needs to solve the question. The visitations are virtual (GOOGLE Street View) and therefore, to complete these tasks the access to the internet is vital. This is, also, why the student need 24 hours to solve a question. The process is planned to give him a rich experience, with surprises and challenges, while he solves a physics problem.

**7. ABOUT THE QUESTIONS CORRECTION.** The questions answers are corrected by the IPhCO Committee.

**8. ABOUT THE REGISTRATION.** The school, through the representative teacher, will be able to enroll students from **September 17th to October 25th** by filling the School Form. The student enrolled by the teacher must also complement his data, providing his mailing address, through the Student Form.

On Friday, October 30, the teacher will receive a list with the names of the students who confirmed their enrollment trough the Student Form.

IPhCO – 2020 - Registration	
TEACHER	STUDENT
<b>School Form:</b> to register the school and enroll the students who wish to participate.	<b>Student Form:</b> The student confirms his name, email and mailing address. (*)
Registration Period	
September 17 <sup>th</sup> to October 25 <sup>th</sup>	

(\*) The student who wishes to register must contact the representative teacher of his school – usually a physics or math teacher - so that he can add his name to the list that will be sent to IPhCO through the School Form. Only students enrolled by the teacher must complete the Student Form.

**9. ABOUT THE CERTIFICATES AND THE AWARDS.** Certificates of participation will be sent to students and teachers. Students will be awarded with a series of 3 collectible postcards depending on their performance. Each card comes with congratulations from the IPhCO Team and with a printed key on the back: copper, silver or gold. Students who win the golden key receive three cards - the complete collection; silver key: two cards and copper key: one card.

**10. ABOUT THE COSTS.** IPhCO has no costs. There is no registration fee or any cost for schools or students participating in the IPhCO.

**12. ABOUT THE DATE.** The 4<sup>th</sup> IPhCO will begin on November 4<sup>th</sup>, according to the schedule provided.

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