

International Young Physicists' Tournament



IYPT

We, the organization stated below, hereby file an

Application for Recognition as an IYPT Member Organization (IMO)

in accordance with Article 7, Section 1 of the Statutes of the IYPT.

Name of Organization:	Naravoslovno matematično združenje Slovenije; Slovenian association for Natural Sciences and Mathematics
Legal Type of Organization: (e.g. school, university, association (NGO),)	Association
Registration details:	Registered on 13. 09. 2017 in Maribor
Full Address: (including country)	Koroška cesta 160, 2000 Maribor, Slovenia
Email Address:	nmk@um.si
Organisation website:	https://nmk.fnm.um.si/
Tournament website:	http://siypt.ijs.si/

To comply with the regulation that applications for IMO status can only be made by someone who has participated in one of 5 most recent IYPTs (either as an observer, team or guest team member, team leader, or juror). This person commits to act as a team leader of the team participating at IYPT on behalf of this IMO. This person can be changed by the IMO at any time to another person fulfilling the qualification criteria.

Name:	Giorgi Khomeriki
Email Address:	khomeriki@ksu.edu
Last participated IYPT in year:	2023
Last participated IYPT as: (observer, team member, team leader, or juror)	Juror

We declare that we will respect and comply with the Statutes and the Regulations of IYPT. In particular, we agree to implement an IYPT qualification procedure, which shall be open to all students/teams from the country we represent. This qualification procedure shall be organized as a non-profit event. We annex a brief description of the selection procedure performed in our country.

In case our application is accepted, we nominate the following person to represent us in the International Organizing Committee (IOC), until further notice. Changes in our IOC representative will be announced (in due time) to the President of IYPT in writing.

Name:	Sergej Faletič, PhD
Email Address:	sergej.faletic@fmf.uni-lj.si

We give explicit consent to publish the contact details of our organization and our designated IOC representative on the IYPT website.

Date and Place: 20. 6. 2024, Maribor

Name and Position (e.g. President, Secretary General, ...) of the person authorized to sign this application on behalf of the organization:

Prof. Robert Repnik, PhD, president

Signature of authorized person on behalf of organization:

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Signature of person who participated IYPT before and will act as the team leader:

Signature of designated IOC representative:

Annex: Brief description of the selection procedure

SiYPT rules: Teams of three from the same school can register. The teams must undergo a school competition to qualify. In which they have to reach the first place in school to advance.

The advancing teams compete in regular physics fights, like IYPT, judged by a jury and the first team is selected for the an international competition. Additional members are the next in line raknked by points.



Terms used:

SiYPT: Slovenian Young Physiciyts' Tournement AYPT: Austrian Young Physiciyts' Tournement IYPT: International Young Physiciyts' Tournement

The regulations of the SiYPT currently state the following main points:

- Any school with students between ages of 15 and 19 can apply.
- A school must apply a team of three students.
- A school must organise a school competition even if only one team is present. Scoring sheets are used for the competition and the national committee reserves the right to ask the jurors of the school competition for justification of their grades.
- To qualify for the national tournament, the school team must receive at lest 50% of the points. More than one team from the same school can qualify.
- The teams that qualify for the national competition compete in physics fights before a jury.
- The jury is comprised of at least five members for each round. These members are from at least two different physics research-related institutions. Usually, the jurors are from University of Ljubljana Faculty of Mathematics and Physics (FMF UL), University of Maribor Faculty of Natural Sciences and Mathematics, "Jožef Stefan" Institute (IJS) and former IYPT and AYPT participants who study physics or are employed at these institutions.
- The winning team is automatically qualified for an international competition. When applying to IYPT 2 members are added to the team according to individual ranking in a national selection process described in the next point.
- All applicants for the IYPT team are required to submit a video of their 12-minute presentation of a solution to one of the problems. The presentation is graded by the jury.
- The additional members are selected based on the ranking of their presentation.

Preparation of the national team

- Once the national team has been assembled, they gain access to the staff and equipment of the University of Maribor, Faculty of Natural Sciences and Mathematics.
- The team is assigned mentors for specific fields of their research and the team leader as the overview.
- The team receives training in IYPT procedures.
- The team is also supported by experts from FMF UL and IJS.

History

In 2012, Slovenia first competed at IYPT. The team was lead by Rok Capuder with the current head of the organising committee, Sergej Faletič, as an associated member. The team came from one school. In 2013, we opened the competition to individual applicants and participated in IYPT 2013 and 2014. Slovenia did not participate in IYPT again until 2024. In 2014, Slovenia first participated in AYPT with a team of five students from different schools. In 2017, AYPT changed the rules to accept teams of three students. In that year Slovenia participated at AYPT with a team of three students from the same school. Due to the very good synergy of the team from the same school, in 2018 the rules of SiYPT were changed to allow application only to teams of three students from the same school. In the following years, Slovenia participated at AYPT almost every year. The achievements are listed below. In 2022, a



former AYPT participant, Mitja Suvajac, took over the preparation of the national team, with Sergej Faletič still serving as the head organiser of the national tournament. In 2023, after years of participation at AYPT, Slovenia again applied for participation at IYPT. Unfortunately, the situation did not permit actual participation. In 2024, Slovenia again applied for participation at IYPT. Slovenia ranked 31/38 with 133.7 points.

Achievements

- IYPT 2012, rank 26/28, 114.6 points,
- IYPT 2013, rank 22/26, 154.4 points,
- IYPT 2014, rank 23/28, 144.5 points,
- AYPT 2014, rank 8/14, 118.5 points,
- AYPT 2017, rank 8/16, 108.5 points,
- AYPT 2018, rank 6/16, 112.5 points,
- AYPT 2019, rank 5/14, 112.6 points,
- AYPT 2021, rank 6/12, 115,5 points,
- AYPT 2022, rank 8/12, 102.8 points,
- AYPT 2023, rank 8/12, 103,9 points,
- AYPT 2024, rank 12/13, 94,2 points,
- IYPT 2024, rank /38, 133,7 points.

As the results above show, every year at AYPT, team Slovenia was able to obtain more than 50% of the points, which is an above average performance.

Plans

As SiYPT grows, there are more and more calls to open the competition again to individual participants. We envision a change of rules for the 2025 season with application from individual students, which should increase the number of applicants. The students will compete in a qualification phase for the national tournament. The national tournament will retain the structure of the physics fights among triplets of individual students for the selection of the final team to apply for AYPT and/or IYPT.

Sergej Faletič

Head of SiYPT Candidate for member of the IOC.

Mitja Suvajac

Team leager of team Slovenia-