

## EUCYS 2023 Prizes

34<sup>th</sup> European Union Contest for Young Scientists, Brussels

### The First Prize

Name	Nationality	Project title
Maksymilian Gozdur	Poland	Justice institutions stipulated in French and Polish criminal procedure codes, and fair trial standards included in international law standards and convict rehabilitation
Elizabeth Chen	Canada	Optimization of CAR-T Cell Therapy using RNA-Sequencing Analysis for Biomarker Identification
Martin Stengaard Sørensen	Denmark	Development of small regeneratively cooled rocket propulsion systems
Afonso Jorge Soares Nunes Inês Alves Cerqueira Mário Covas Onofre	Portugal	SPIDER-BACH2

## The Second Prize

<b>Name</b>	<b>Nationality</b>	<b>Project title</b>
Clément Hervé Joël Vovard	Netherlands	Developing and testing a Lagrangian model of the floating-arm trebuchet
Arushi Nath	Canada	Developing Algorithms to Determine an Asteroid's Physical Properties and the Success of Deflection Missions
Liam Brendan Carew Shane O'Connor	Ireland	Assessing the Impact of Second-Level Education on Key Aspects of Adolescents' Life and Development'
Filippo Mutta	Italy	Operating Systems: The Key To A New World

## The Third Prize

Name	Nationality	Project title
Lyubomir Andonov Nenov	Bulgaria	Dynamic Proactive Secret Sharing for Confidential Byzantine Fault-Tolerant Services using Multi-party Computation
Alex Kanderka Jozef Jabczun	Slovakia	Remediation of polychlorinated biphenyls (PCBs) and heavy metals via sustainable removal techniques
Aias Tatsis	Greece	Development and evaluation of a hybrid solar-thermoelectric power generation system in a marine environment and usage of hydrodynamic propulsion
Mert Kemal Uçkan Emel Karahan	Germany	Modelling of a population during climate change

**SIYSS**

<b>Name</b>	<b>Nationality</b>	<b>Project title</b>
Maksymilian Gozdur	Poland	Justice institutions stipulated in French and Polish criminal procedure codes, and fair trial standards included in international law standards and convict rehabilitation
Clément Hervé Joël Vovard	Netherlands	Developing and testing a Lagrangian model of the floating-arm trebuchet

**LIYSF**

<b>Name</b>	<b>Nationality</b>	<b>Project title</b>
Filippo Mutta	Italy	Operating Systems: The Key To A New World

**ESA**

<b>Name</b>	<b>Nationality</b>	<b>Project title</b>
Martin Stengaard Sørensen	Denmark	Development of small regeneratively cooled rocket propulsion systems

**CERN**

<b>Name</b>	<b>Nationality</b>	<b>Project title</b>
Szilveszter Laskai	Hungary	Design of traction inverter with SiC semiconductors

**EUROFusion**

<b>Name</b>	<b>Nationality</b>	<b>Project title</b>
Anastasia Bolkvadze Irakli Veshapeli	Georgia	Making a High-Aperture Varifocal Membrane Reflector Telescope



**ESRF**

<b>Name</b>	<b>Nationality</b>	<b>Project title</b>
Iļja Niks Stoliņo	Latvia	Empirical prediction of chalcopyrite lattice parameters from chemical properties of their constituent elements

**EMBL**

<b>Name</b>	<b>Nationality</b>	<b>Project title</b>
Marina Sokolova	Czechia	Study of the R38-K40 ribosome binding site in the Rack1 protein using the Morg1 protein model

**ESO**

<b>Name</b>	<b>Nationality</b>	<b>Project title</b>
Julian Seeholzer	Switzerland	Theoretical and Experimental Analysis of a Generalised Brachistochrone Problem for Mechanical Systems Including Coulomb Friction and Rotational Motion

**ILL**

<b>Name</b>	<b>Gender/Age/Nat.</b>	<b>Project title</b>
Charlotte Klar Katharina Austermann	Germany	Thermally triggered motion of pyrolytic graphite on a magnet array

**XFEL**

<b>Name</b>	<b>Nationality</b>	<b>Project title</b>
Afonso Jorge Soares Nunes Inês Alves Cerqueira Mário Covas Onofre	Portugal	SPIDER-BACH2

**CNIC Prize**

<b>Name</b>	<b>Nationality</b>	<b>Project title</b>
Sachi Premaratne	Sweden	Antibodies targeting transient receptor potential vanilloid 1 as potential drug candidates for the treatment of chronic pain

**CBE JU**

<b>Name</b>	<b>Nationality</b>	<b>Project title</b>
Elisa Jääskeläinen	Finland	Valuable Products from Waste Cotton – Optimising the Pre-treatment of Cellulose Nanocrystal Production

**International Swiss talent forum**

<b>Name</b>	<b>Nationality</b>	<b>Project title</b>
Shachar Perlman Jonathan Halperin	Israel	Using network centrality measures as predictors of gene drive deployment outcomes



## Expo-Sciences Luxembourg

Name	Nationality	Project title
Nanna Elizabeth Rosa Kalmar	Denmark	Let There Be (Optimal) Light

**EuCheMS**

<b>Name</b>	<b>Nationality</b>	<b>Project title</b>
Martyna Kniazevaitė	Lithuania	Reduction of Perchlorate Ion Concentrations in Martian Soil using <i>Azospira oryzae</i>

**Bulgarian Workshop on Coding Theory**

<b>Name</b>	<b>Nationality</b>	<b>Project title</b>
Szymon Perlicki	Poland	A Novel Method of Constructing Block Ciphers Resistant to Linear and Differential Cryptanalysis

**Regeneron ISEF 2024 Los Angeles, California (May 2024)**

<b>Name</b>	<b>Nationality</b>	<b>Project title</b>
Felix von Ludowig Tim Arnold	Germany	Rekari – the intuitive platform for diverse drone operations
Deyan Deyanov Hadzi-Manich	Bulgaria	A Graph Isomorphism Kernel Based on k-Vertex Connectivity and its Application in Graph Neural Networks