



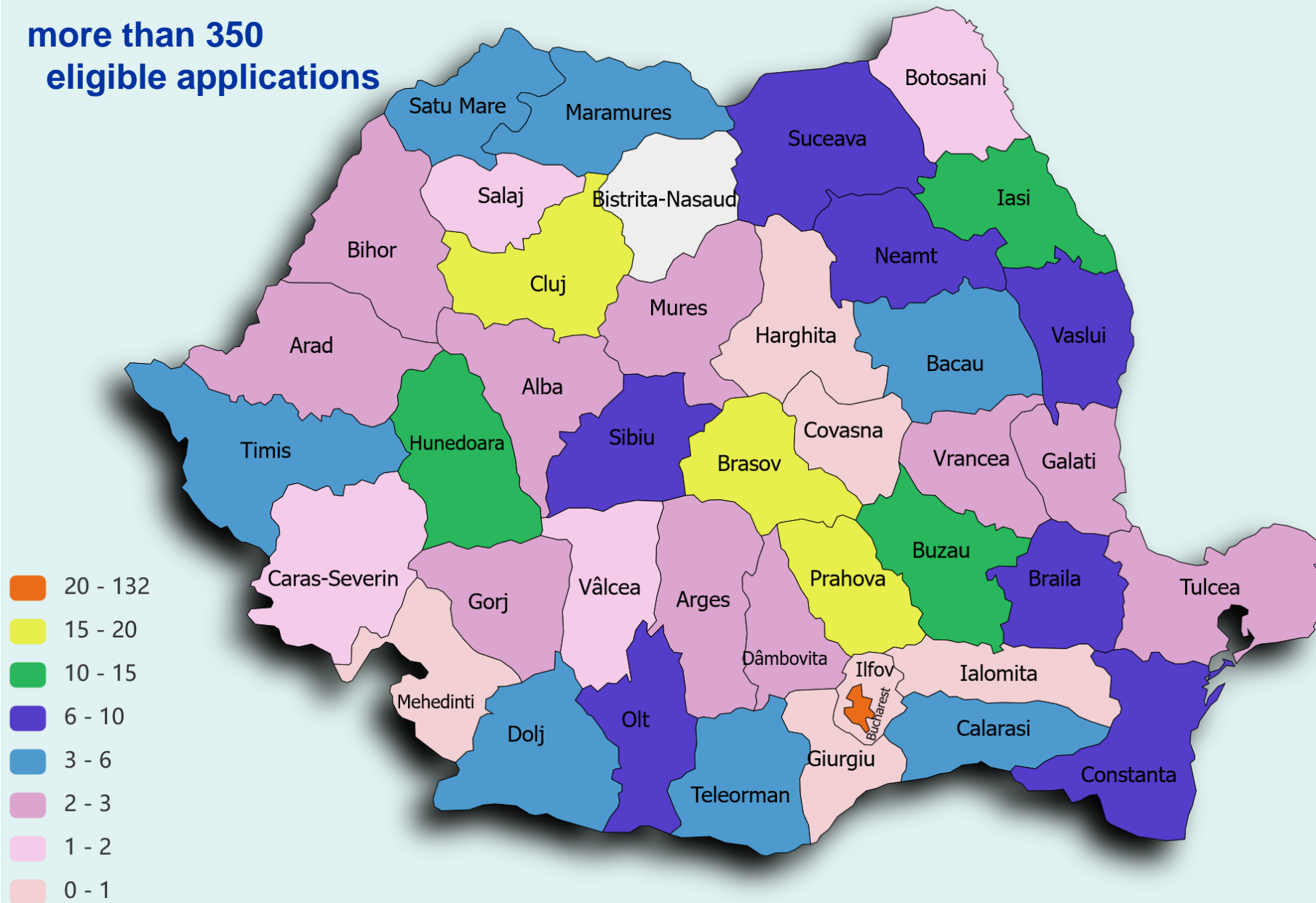
Romanian High-School Students Internship Programme 2024

program dedicat elevilor români

2 – 16 iunie 2024

HSSIP-RO 2024

more than 350
eligible applications





HSSIP-RO 2024

24 selected pupils @CERN!



Accompanying teachers @CERN

- **Diana Bejan**, Colegiul Național de Informatică Piatra Neamț
- **Dan Pruteanu**, Colegiul de Științe ale Naturii “Emil Racoviță”
- **Tiberiu-Virgil Drăgoiu-Luca**, Facultatea de Fizică,
Universitatea Babeș-Bolyai Cluj-Napoca

Train, educate and engage



- **Echipa la CERN (și din România):**

Sascha Schmeling, *CERN*

Sarah Zöchling, *CERN*

Roxana Zus, *UB*

Călin Alexa, *IFIN-HH*

Alexandra Tudorache, *IFIN-HH*

Valentina Tudorache, *IFIN-HH*

Ioana Duminică, *UB & IFIN-HH*

- **Echipa din România:**

Marina Rotaru, *IFIN-HH*

Raluca Sibinescu, *UB*

Andreea Cârstea, *UB*

Cristina Melinte, *IFA*



+ support from ministries, academics, researchers, administration

Romanian High-School Students Internship Programme 2024

Sesiunea de deschidere / Opening plenary

- **Prezentarea introductivă/ Introduction to HSSIP-RO 2024:**
Sarah Zöchling, HSSIP CERN
- **Prezentarea programului și a temelor pentru prezentări / Introduction to the programme and the presentations**
Roxana ZUS, reprezentant România - CERN Teacher and Student Forum, *Universitatea din București*
& the HSSIP-RO team
- **Prelegerea inaugurală / Opening lecture:** Jeff Wiener, CERN Teacher Programmes Manager
Introduction to CERN
- **Moderator:** Roxana ZUS, Facultatea de Fizică, Universitatea din București

Your contribution?

Enjoy the lectures, the visits, the interaction with everyone@CERN!

Prepare your presentations/ projects

	Presentation title - suggestion		
1	Why was the Large Hadron Collider built?	9	Applications of particle physics in medical field (e.g. Positron emission tomography)
2	Achievements and challenges of the Standard Model	10	What is the Data Quality Monitoring good for?
3	Why are there two general-purpose experiments at the LHC?	11	What is the Grid computing doing for data analysis?
4	How can we accelerate particles (including examples in nature)?	12	Why does the Standard Model have to be extended?
5	How can we accelerate particles (including examples in research)?	13	From cloud chambers to bubble chambers and the Z boson
6	How can we detect particles (part I+II)?	14	Why some particle physicists are very excited about penguins?
7	Why do detectors at CERN look like onions? Introduction to particle identification!	15	The energy and precision frontiers of particle physics. Why do we need both?
8	Detectors: why do they need continuous improvements?	16	Where's all the antimatter? Antimatter studies @CERN

What's next?

<https://indico.cern.ch/event/1369306/timetable/>

13:00	→ 13:50	Registrations 1st group	🕒 50m	✎
		Speaker: Sarah Zoechling (CERN)		
13:50	→ 16:00	Visit at CERN		✎
	13:50	Meeting Point and Group Distribution	🕒 10m 📍 Synchrocyclotron (300) (CERN)	✎
		in front of Synchrocyclotron (300) Group 1 will visit SC and AVC Group 2 will visit AVC and SC		
	14:00	Visit at CERN: Synchrocyclotron	🕒 50m	✎
		Speakers: Ms Joni Pham (University of Melbourne (AU)), Julia-Suzana Dancu (Imperial College (GB))		
	15:00	Visit at CERN: ATLAS visitor center	🕒 50m	✎
		Speakers: Julia-Suzana Dancu (Imperial College (GB)), Veronika Zamkovska		
	15:50	Meeting Point	🕒 10m 📍 Synchrocyclotron (300) (CERN)	✎
		in front of building Synchrocyclotron (300)		
16:00	→ 16:50	Registrations 2nd group	🕒 50m	✎
		Speaker: Sarah Zoechling (CERN)		