



## Agenda of the Online Learning Activity C1 - Mathematics and Environmental Science

### **Objectives**:

During the C1 online LA, the students will:

- develop their creativity, initiative, critical thinking, problem-solving skills, etc. by working with their peers on the research topics;
- learn about math research methodology by meeting math researchers;
- learn about Environmental Science by attending a lecture on Environmental Science and methodology of research in Environmental Science;
- be engaged to exchange ideas by working in groups.

#### Platform to be used: Zoom

**Participants**: (at least) 10 participants from each partner school will attend all the C1 online LA; additional, some students may participants only in some of the activities + (at least) 1 teacher from each partner school

Day	Time	Topic/ activity	Comments
27 January 2021	10.30 – 12 French Time (CET) 11.30 – 13 Romanian Time (EET)	Lecture Mircea Sofonea - What does it mean to be a math researcher + Q&A session	Mircea Sofonea – Researcher at Université de Perpignan (France)
	14.30-16.30 French Time (CET) 15.30-17.30 Romanian Time (EET)	Group working on the research topics. Videoconferences on the research topics 5 and 7 Presentation of the research topic 6	<ul> <li>We will work in 3 breakout rooms: <ul> <li>1<sup>st</sup> breakout room:</li> <li>videoconference on the research</li> <li>topic 7 (participants: students who work on this topic)</li> </ul> </li> <li>2<sup>nd</sup> breakout room:</li> <li>videoconference on the research</li> <li>topic 5 (participants: students who work on this topic)</li> <li>3<sup>rd</sup> breakout room: students who work on the research topic 6 will present their work and findings to students who are not working on the research topic 7 or 5</li> </ul>
28 January 2021	10.30 – 12 French Time (CET) 11.30 – 13 Romanian Time (EET)	Carmen Roba - Interactive presentation on Environmental Science and	CS II dr. Carmen ROBA – researcher at the Faculty of Environmental Science and Engineering, Babes-Bolyai University Cluj- Napoca





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	15 17 Free - h	methodology of research in Environmental Science + Q&A session	
	15-17 French Time (CET) 16-18 Romanian Time (EET)	Group working on the research topics. Videoconferences on the research topics 8 and 9 Presentation of the research topic 10	<ul> <li>We will work in 3 breakout rooms: <ul> <li>1<sup>st</sup> breakout room:</li> <li>videoconference on the research</li> <li>topic 8 (participants: students who work on this topic)</li> </ul> </li> <li>2<sup>nd</sup> breakout room:</li> <li>videoconference on the research</li> <li>topic 9 (participants: students who work on this topic)</li> <li>3<sup>rd</sup> breakout room: students who work on the research topic 10 will present their work and findings to students who are not working on the research topic 8 or 9</li> </ul>
29 January 2021	10.30 – 12 French Time (CET) 11.30 – 13 Romanian Time (EET)	Lecture Yves Papagay - "Beyond programming, how machines learn?" + Q&A session	Yves Papagay – researcher at INRIA Sophia Antipolis, France
	15-17 French Time (CET) 16-18 Romanian Time (EET)	Group working on the research topics. Videoconferences on the research topics 11, 1, 3 & 4 (in parallel)	<ul> <li>We will work in 4 breakout rooms: <ul> <li>1<sup>st</sup> breakout room:</li> <li>videoconference on the research</li> <li>topic 11 (participants: students</li> <li>who work on this topic)</li> </ul> </li> <li>2<sup>nd</sup> breakout room:</li> <li>videoconference on the research</li> <li>topic 1 (participants: students who</li> <li>work on this topic)</li> <li>3<sup>rd</sup> breakout room:</li> <li>videoconference on the research</li> <li>topic 3 (participants: students who</li> <li>work on this topic)</li> </ul> <li>4<sup>th</sup> breakout room:</li> <li>videoconference on the research</li> <li>topic 3 (participants: students who</li> <li>work on this topic)</li> <li>4<sup>th</sup> breakout room:</li> <li>videoconference on the research</li> <li>topic 3 (participants: students who</li> <li>work on this topic)</li>



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Research topics	FR - Pertuis	RO - Cluj	FR – Ales	RO – Satu-Mare
1 - Modélisation de l'impact carbone de la venu des élèves au lycée		2 groups (5 students)		1 group (2 students)
2 3 - Comment	1 group (2		2 groups (F	
compter une population de loups	1 group (3 students)		2 groups (5 students)	
4 - Optimisation de la consommation électrique d'un établissement	2 groups (5 students)		2 groups (5 students)	1 group (4 students)
5 - Étude des	3 groups (6	3 groups (9	1 group (1	1 group (3
espèces invasives 6 - La construction de logements durables	students)	students) 2 groups (8 students)	student)	students)
7 - Modélisation de la croissance de végétaux	1 group (4 students)	1 group (3 students)		
8 - Volume d'un arbre	1 group (2 students)	2 groups (6 students)	1 group (2 students)	
9 - Panneaux solaires	1 group (2 students)	2 groups (4 students)	1 group (4 students)	1 group (3 students)
10 - Déterminer le jour d'épuisement des ressource de votre établissement				1 group (2 students)
11 - Couloirs et distanciation	1 group (4 students)	1 group (3 students)		1 group (3 students)

