JASSY Summer School
14 - 20 July 2025
ALEXANDRU IOAN CUZA UNIVERSITY of IAȘI - ROMANIA

HS - Hard Sciences: new trends in physics, mathematics and computer science
Coordinator: Prof. dr. habil. Ionuț Topală (ionut.topala@uaic.ro)

Date	Time	Course title	Lecturer / Coordinator	Meeting place (actual location)
14 July (Mon)	08:00-09:00	**Registration -** *All JASSY modules*		*Mihai Eminescu* Aula Magna Building A, 1st floor
	09:00-10:00	**JASSY Summer School opening** Introduction of the JASSY coordinators. **Keynote presentation** Group photo - *All JASSY modules*		
	10:00-11:00	Guided tour of the University Palace ("Hall of Lost Steps" Mural Gallery, „Gh. Asachi" Library, Tafrali Bookshop)	Mihai Bulai	UAIC main entrance – *the Two Lions*
	11:00-12:40	Basic optimization algorithms which cannot exist without "a little bit of math"	Dumitrel Ghiba	L1 Hall, Building A
	14:20-16:00	Introduction to Mixed Realities	Adrian Iftene	
	18:00–19:30	JASSY welcome buffet. *All JASSY modules*		Terrace of CUI / *Casa Universitarilor*
15 July (Tue)	09:00-10:40	Recommendation systems algorithms	Laura Cornei	L1 Hall, Building A
	11:00-12:40	A hands-on experience in machine learning	Diana Trandabăț	
	14:20-16:00	The correlation between microstructure and functional properties in materials for microelectronics	Lavinia Curecheriu	
	16:30-19:30	Guided tour of the Iași city center. Possible visit of Iași National Opera & Theater Grand Hall. *All JASSY modules*	Mihai Bulai & Manuel Foșalău	UAIC main entrance – *the Two Lions*
16 July (Wed)	09:00-10:40	Mathematical models in Life Sciences	Iulian Stoleriu	L1 Hall, Building A
	11:00-12:40	Introduction to Cryptography and Internet of Things (IoT)	Anca Maria Nica	
	14:20-16:00	Chaos and self-organization	Dan Dimitriu	
	16:30-19:30	*Individual study or case study teamwork*		
17 July (Thu)	09:00-10:40	Artificial Intelligence: what it really is and how it really works	Ionuț Pistol	L1 Hall, Building A
	11:00-12:40	Basic mathematical structures used in cryptography	Răzvan Lițcanu	
	14:20-16:00	Applications of Probability Theory	Lucian Maticiuc	
	18:00-20:00	Birdwatching and Ecotourism principles. Plants and birds' diversity – visit the Iași Botanical Garden, owned by UAIC. *All JASSY modules*	Carmen Gache & Cristiana Virginia Petre	Botanical Garden main entrance
18 July (Fri)	09:00-10:40	Communicating science: delivering clear and interesting scientific information	Mădălina Cocea	L1 Hall, Building A
	11:00-12:40	Diatomic molecular spectra	Ionuț Topală	
	14:20-16:00	Hands on High Energy Particle Physics	Cătălin Agheorghiesei	
	16:30-19:30	*Individual study*		
19 July (Sat)	09:00-10:00	Tour of city center by Café-Tramway – to be confirmed	Mihai Bulai	UAIC main entrance – *the Two Lions*
	10:00-11:40	Artificial Intelligence in Computer Games	Eugen Croitoru	L1 Hall, Building A
	11:00-12:40	Astronomy & Sky Map reading. Sky interpretation at Planetarium	Cătălin Galeș	Hall L1, + Planetarium Building A
	14:00-18:00	*Independent city exploration.* Optional: Visit of History/Arts/Folk/Technical museums in the Palace of Culture		
	18:00-19:30	Closing cocktail. *All JASSY modules*	All coordinators	Terrace of CUI / *Casa Universitarilor*

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20 July (Sun)	08:00-19:30	Trip to the region: (Proposed itinerary: Iași – Ruginoasa – Voroneț – Dolheștii Mici – Cotnari – Iași)	Mihai Bulai Other coordinators	UAIC main entrance – the *Two Lions*

☐ **Common activities for all modules**	**Weektime (only Monday to Friday):** **10.40 – 11.00 – coffee-break** (except Monday) **13.00 – 14.00 – lunch break** (*Titu Maiorescu* University Cafeteria).

REMOTE WORK GROUP

ONLINE MEETING

Date		Course title	Lecturer / Coordinator	Meeting place
23 -24 July (Wed - Thu)		Presentation of the experimental research facilities in physics, mathematics and computer science @ UAIC Group/individual work presentation	Ionuț Topală	Cisco Webex/ MS Teams/ GMeet