

GENERAL INFORMATION

SPLOŠNE INFORMACIJE

PROGRAM

Monday, June 17 th , 2024	
Ponedeljek, 17. junij 2024	
08:00–13:00	REGISTRATION / PRIJAVA UDELEŽENCEV
09:00–09:15	OPENING CEREMONY / OTVORITVENA SLOVESNOST
	SESSION 1 SKLOP 1
09:15–09:45	<i>Keynote lecture / Plenarno predavanje</i> I. D. Sasowsky: The diversity of karst geo-data and challenges for acquisition, management, analysis, and storage
09:45–10:00	N. Zupan Hajna et al.: From pilot samples to high-resolution approach (to methodology of paleomagnetic sampling of karst sediments)
10:00–10:15	N. Lončar et al.: Monitoring of water-level fluctuations in a coastal cave: methods and implications for POS based sea-level reconstructions
10:15–10:30	D. Brunović et al.: Imaging the submerged karst landscapes in the eastern Adriatic Sea using acoustic methods
10:30–11:00	<i>Coffee break / Odmor za kavo</i>
	SESSION 2 SKLOP 2
11:00–11:30	<i>Keynote lecture / Plenarno predavanje</i> M. Ćuk Đurović: Qualitative and quantitative approach for understanding karst hydrodynamics in artificial and natural conditions
11:30–11:45	L. Durand et al.: Characterization of the hydrogeological role of weathered rock in karst aquifer using a multidisciplinary and multiscale approach
11:45–12:00	L. Keim & H. Class: Integrative analysis of long-term CO ₂ measurements and weather patterns in the Swabian Jura: Insights into karst processes and potential speleogenesis
12:00–12:15	A. Švara et al.: Post-Miocene tectonically induced hydrological changes revealed by cave sediments (Loza Cave System, W Slovenia)
12:15–14:00	<i>Lunch break / Odmor za kosilo</i>
	SESSION 3 SKLOP 3
14:00–14:30	<i>Keynote lecture / Plenarno predavanje</i> M. D. Covington: Leveraging open data and open source software to study karst processes
14:30–14:45	I.-K. Giannopoulos et al.: First approach on the multiparametric study for the development and evolution of a karstic environment: The case of Petroto karstic system (Northern Greece)
14:45–15:00	D. Paar et al.: Challenges of non-periodic behaviour in cave climate and other karst processes due to climate change
15:00–15:15	F. Šarc et al.: Dedolomitization in the cave environment – link to speleogenesis and geomorphological development of the carbonate-siliciclastic area in Central Slovenia
15:15–15:30	V. Mai Yung Sen et al.: Late Miocene to Quaternary relief evolution, cave networks development, and tectonic/climatic forcing in the Western French Alps
15:30–15:45	<i>Break / Odmor</i>
	SESSION 4 SKLOP 4
15:45–16:15	<i>Keynote lecture / Plenarno predavanje</i> R. Mihevc: Building a doline map with applied machine learning
16:15–16:30	C. Baral et al.: GIS in 3D: A tool for karst reservoir studies - Example of Larzac Causse, southern France

Cultural Centre Postojna
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16:30–16:45	C. Denizman: Spatial Data Acquisition and Analysis in Karst by GIS: Examples from Florida and Turkey	KRI IZRK
16:45–17:00	N. Bočić et al.: Making a geomorphological map in karst area based on high resolution DEM - experiences from the Plitvice Lakes National Park (Croatia)	
17:00–17:15	M. Torab & N. Fayad: LiDAR Scanning's 3D mapping of Abu Sariye Alabaster Cave, Assiut Governorate, the Eastern Desert of Egypt	
17:15–17:30	<i>Break to move / Odmor za premik</i>	
	POSTER SESSION POSTERJI	
17:30–19:00	Quick poster presentations / Hitra predstavitev posterjev	
19:00–21:00	ICE BREAKER and KARST JAM UVODNO DRUŽENJE in KRAŠKE DEBATKE	

Tuesday, June 18th, 2024		Cultural Centre Postojna Kulturni dom Postojna
Torek, 18. junij 2024		
08:30–11:00	REGISTRATION / PRIJAVA UDELEŽENCEV	
	SESSION 5 SKLOP 5	
09:00–09:30	<i>Keynote lecture / Plenarno predavanje</i> M. Perne et al.: Data acquisition for analysis through modelling	
09:30–09:45	P. Bosák & P. Bella: Sulfuric Acid Speleogenesis in the Plavecký Karst, Slovakia (model developed during data acquisition)	
09:45–10:00	A. Stachnik et al.: Patterns of precipitation $\delta^{18}\text{O}$ through the Iberian Peninsula: Machine Learning dynamic modeling for climate proxy calibration	
10:00–10:15	P. Sierpień et al.: "Dirty calcite" and the search for suitable correction coefficient – an experimental approach	
10:15–10:45	<i>Coffee break / Odmor za kavo</i>	
	SESSION 6 SKLOP 6	
10:45–11:15	<i>Keynote lecture / Plenarno predavanje</i> S. Jaillet: 3D analysis and geomorphology of Upper Palaeolithic decorated caves (Grotte Chauvet, Grotte aux Points, Grotte des Deux Ouvertures, Ardèche, France)	
11:15–11:30	P. Herich & M. Budaj: On Sustainable Cave Mapping	
11:30–11:45	G. Cazes et al.: Achieving full scale high resolution 3D cave mapping using action cameras and photogrammetry	
11:45–12:00	J. Littva et al.: A comparison of the structural data acquired in the Okno Cave (Slovakia) from field research versus the laser scanner 3D models – a case study	
12:00–12:15	J. Obu et al.: Quantification of hourly particle movements on sorted circles in a karst cave in Slovenia	
12:15–14:00	<i>Lunch break / Odmor za kosilo</i>	
14:00–14:15	M. Temovski et al.: Neogene-Quaternary karst and landscape evolution in Crna Reka basin constrained by geochronological data from caves based on U-Th and cosmogenic nuclide burial age dating	
14:15–14:30	F. Morelli & T. Piacentini: New approaches to identifying and classifying karst landforms in the Central Apennines (Abruzzi, Central Italy)	
14:30–14:45	<i>Break / Odmor</i>	
14:45–15:00	S.-E. Lauritzen: Analytic methods in structural speleology and deducing the "unit cell" of stripe karst caves	
15:00–15:15	B. Rožič et al.: Provenience of limestones used for Stečki Tombstones in the Dinaric Karst, Bosnia and Herzegovina	

15:15–15:30	A. Entrena et al.: Phreatic overgrowths on speleothems (POS) from coastal caves: classification and characterization	
15:30–15:45	K. Karbowski et al.: The Pleistocene remains horses (genus Equus) from Slovenian Karst - the preliminary results	
17:00–19:30	Afternoon field trip (A) / Popoldansko terensko delo (A) Acquisition and processing of cave air physical parameters in Postonjska jama. <i>Walk (several km).</i> Zajem in obdelava fizikalnih parametrov jamskega zraka v Postonjski jami. <i>Hoja (nekaj km).</i>	

Wednesday, June 19 th , 2024		
Sreda, 19. junij 2024		
08:30–09:30	REGISTRATION / PRIJAVA UDELEŽENCEV	Cultural Centre Postojna Kulturni dom Postojna
	SESSION 7 SKLOP 7	
09:00–09:30	<i>Keynote lecture / Plenarno predavanje</i> T. Olarinoye: Building FAIR data for karst hydrology and applications to foster research advances	
09:30–09:45	L. Soto et al.: Cave and Karst Data Management at the USDA Forest Service, USA	
09:45–10:00	B. Miklavič et al.: Contrasting occurrence of karrentisch in Alpine and tropical environments and challenges of their analysis	
10:00–10:15	A. Piquerez & J. Thierrin: Investigations volatile organic compound contamination in a Swiss karst system used for drinking water supply	
10:15–10:45	<i>Coffee break / Odmor za kavo</i>	
	SESSION 8 SKLOP 8	
10:45–11:15	<i>Keynote lecture / Plenarno predavanje</i> L. E. P. Travassos et al.: Microclimatic characterization of tourist caves in Cavernas do Peruaçu National Park, Minas Gerais, Brazil	
11:15–11:30	W. Chen et al.: Occurrence of Organochlorine Pesticides (OCPs) in Multimedia Environment from Zigui Karst Area, China	
11:30–11:45	M. Kazmer et al.: Karst evolution in Borneo, Malaysia	
11:45–12:00	D. Cailhol & B. Gely: The Ebbou cave in Ardèche, France, an archaeological site confronted with karst evolution	
12:00–12:15	D. Szieberth et al.: Anthropogenic effects in the thermal springs of the Transdanubian Mountains	
12:15–14:30	<i>Lunch break / Odmor za kosilo</i>	
15:00–19:00	Afternoon field trip (B) / Popoldansko terensko delo (B) Groundwater flow in the Ljubljana recharge area. <i>Bus drive and walk (several km).</i> Tok podzemne vode v porečju kraške Ljubljane. <i>Vožnja z avtobusom ter hoja (nekaj km).</i>	

Thursday, June 20 th , 2024 Četrtek, 20. junij 2024		
08:30–18:00	Whole-day field trip (C) / Celodnevno terensko delo (C) Radensko polje. <i>Bus drive and walk (several km).</i> Radensko polje. <i>Vožnja z avtobusom ter hoja (nekaj km).</i>	
18:00–19:30	<i>Break / Odmor</i>	
19:30–	Reception at the Karst Research Institute Sprejem na Inštitutu za raziskovanje krasa	IZRK KRI

Friday, June 21 st , 2024 Petek, 21. junij 2024		
9:00–17:00	Whole-day field trip (D) / Celodnevno terensko delo (D) Reka-Timava flow system in Kras/Carso. <i>Bus drive and walk (several km).</i> Sistem Reka-Timava in tok vode skozi planoto Kras. <i>Vožnja z avtobusom ter hoja (nekaj km).</i>	

LIST OF POSTER PRESENTATIONS

The following list presents the order of the 2-min long flash presentations. Authors are kindly invited to prepare 1–2 slides to attract attention to the content of the poster. Flash presentation and poster showing will both take place at Karst Research Institute ZRC SAZU.

	1 st AUTHOR	TITLE
1	Bajo Petra	Seasonality in cave air and drip water properties – implications for speleothem palaeoclimate studies, Nova Grdosova cave (Croatia)
2	Bajraktari Fadil	Necessity of establishing geoinformation for speleological heritage objects in Kosovo
3	Bania Dominika	Morphostructural and geomorphometric properties of the Rovte karst (Central Slovenia)
4	Błaszczuk Marcin	Paleoclimatic implications of The Tatra Mountains in Central Europe during MIS 11-6 based on multi-proxy speleothem records
5	Calabrò Laura	POS-based MIS 5e Relative Sea Level for Mallorca and Sardinia
6	Class Holger	Convective Mixing of CO ₂ in Fractures: Small Scale Investigation and Large Scale Implications?
7	Čeligoj Biščak Jasmina	Library of the Karst Research Institute ZRC SAZU
8	Čonč Špela	Modelling the relationship between micro-relief characteristics and the occurrence of cave entrances: the example of the Slovenian Dinaric Karst
9	Čremožnik Zupančič Jerneja	Occurrence of antimicrobial resistant and pathogenic Escherichia coli from the water of two karst springs in Slovenia
10	Džaferagić Ahmed	Cave diving researches of karst springs in the Una river cathment (Bosnia and Herzegovina)
11	Gebus-Czupyt Beata	Sulfur and oxygen isotopes in waters and cave gypsum of the Rovte karst area (central Slovenia)

12	Johnston Vanessa E.	Basic hydrogeochemical methods in karst research
13	Kaminsky Eva	Monitoring of water infiltration into an Alpine karst system during snowmelt events
14	Knez Martin	Karren of Gréolières
15	Kropczyk Aleksandra	Remains of Canidae (Fischer de Waldheim) from the Niedźwiedzia Cave
16	Kure Karin	Morphogenesis of the Čepovan dry canyon
17	Kurečić Tomislav	Building up a depositional model of clastic sediments in the enclosed cave system as a proxy for landscape evolution (Grgos Caves, Croatia)
18	Lončarić Robert	Challenges and obstacles during cave monitoring programs in Modrič Cave (Croatia)
19	Matoušková Šarka	U-series dating of speleothems using ICP-MS – case studies
20	Miklavc Primož	Small, sparsely preserved outcrops of unroofed cave sediments: are they worth investigating?
21	Molero-Monsonis Andrea	Response of dripwaters to Mediterranean climate in Don Juan Cave (E Spain)
22	Mulec Janez	Microbiological exploration of underground environments, ethical and legal dilemmas with implications for extraterrestrial research in role of education
23	Nagl Michael	Quantification of near-surface cave drip-water by combining different measurement approaches
24	Novak Uroš	Dinaric Faults: do they creep
25	Novak Uroš	The Slovenian Near Fault Observatory: SLO KARST NFO
26	Palatinuš Iva	Chronology building using fluorescence in Late Holocene stalagmite from Nova Grgosova cave, NW Croatia
27	Pawlak Jacek	The sampling problem in the construction of a speleothems age distribution curves – introduction for the conception of growing phases
28	Peugnet Guillaume	The impact of subsurface life on ghost-rock karstification processes
29	Rispal Nathan	Element of a pluri-disciplinary project on karstic reservoir characterization: first results of cave sediments paleomagnetic dating in Dévoluy Massif, France
30	Skok Sara	Microbial load and community composition on cave surfaces, and the impact of organic pollution from cattle slurry: A case study of Postojnska jama, Slovenia
31	Stanišić Andrijana	The influence of geotectonics on the hydrogeological conditions and regime of the karst aquifer in the Ravanica zone – Eastern Serbia
32	Stienss Jacek	Dripstone formation from Gigant Cave – one of the oldest caves in Prokletije Mountains (Montenegro)
33	Stokes Tim	Analysis of karst springs data to aid in the understanding karst aquifer processes, disturbances in the karst catchment and longer-term climate change effects
34	Stremțan Ciprian C.	In situ, sequential $\delta^{13}\text{C}$ measurements in speleothem calcite via Laser Ablation Cavity Ring Down Spectroscopy – a novel method
35	Surić Maša	Evolution of twenty-year monitoring in Modrič Cave (Croatia)
36	Szieberth Dénes	An Arduino based tracer detector and flow rate logger for community science and large scale applications
37	Šturm Samo	Introduction of regular monitoring of critical environmental stressors for <i>Proteus anguinus</i> in Škocjan Caves, Slovenia

GENERAL INFORMATION

Registration

- Registration is possible on Monday (8:00 – 13:00), Tuesday (8:30 – 11:00), and Wednesday (8:30 – 09:30) in the Cultural Centre Postojna (Gregorčičev drevored 2a, Postojna) in a separate space in front of the main entrance to the Cultural Centre on the right. **Registration is obligatory for all participants.**

Oral presentations

- Lectures will take place in the Cultural Centre Postojna (Gregorčičev drevored 2a, Postojna).
- PowerPoint presentations **should be given to the organizers** during the break before the Session with the presentation.
- Maximum duration of the lecture is 15 min (12 min for talk and 3 min for discussion). Invited lecturers (keynote speakers) have 30 min for the lecture. Due to a tight schedule, we ask you to please be punctual!

Posters

- Poster size: mandatory max. format is A0 – 841 x 1189 mm (portrait layout).
- Poster presentation and display will be held at the Karst Research Institute in the hall and the stairway.
- Flash presentation session will be organized at the beginning of the poster session. For this, each author(s) is asked to prepare a 2-minute-long flash presentation with 1–2 slides to attract attention to the content of the poster. After the flash session, the posters will be displayed and the authors will be able to answer the questions and discuss their research in detail.
- Leave the posters and short poster presentations (.ppt, .pdf) at the registration desk on Monday, June 17th, before the lunch break.
- Stand by your poster during the poster display.

Meals

- Lunches are not organized during the session days and afternoon field trips (Tuesday and Wednesday).
- During whole-day field trips (Thursday and Friday) simple lunches will be provided. Due to the length of the Thursday's and Friday's excursions (Excursion C and D) we suggest you take with you some additional snacks.
- Lunch breaks are timetabled into the schedule during the session days (Monday, Tuesday and Wednesday). You can go for lunch to e.g. Štorja pod stopnicami, Bar Bor, Pri kaminu, Čuk, Bistro Perspektiva, etc.
- On Thursday a reception dinner will be provided.

Field trips

- All fieldtrips, except on Tuesday, will be combined with a bus drive and walk (several km per day).
- Registration for each field trip will be possible only on Monday, 17th June 2024 at the registration desk.
- Bus departure for the field trips is from the parking place at the Postojna bus station (marked as No. 3 on the Map of Postojna).
- Because of visits of caves, walking shoes, field clothes and headlamps are obligatory. At most excursions, a lot of walk is expected. Please, be ready for possible hot weather or/and rain.
- Insect repellents are recommended as we will be walking in areas populated with ticks (Ixodes ricinus) that transfer mainly lyme disease and tick-borne meningitis. Check yourself in the evening after each field trip.
- Participation on the excursions is voluntary and at your own risk. The organizers do not accept any liability for any loss, damage, injury or death arising from or connected with the excursions. Participants are advised to arrange an appropriate insurance policy. The participants are obliged to comply with the instructions of the organizers.

OSNOVNE INFORMACIJE

Prijava

- Registracija je mogoča v ponedeljek (08:00 – 13:00), torek (08:30 – 11:00) in sredo (8:30 – 09:30) v Kulturnem domu v Postojni (Gregorčičev drevored 2a, Postojna), v ločenem prostoru pred glavnim vhodom v Kulturni dom, desno. **Registracija je obvezna za vse udeležence.**

Predavanja

- Večina predavanj poteka v Kulturnem domu v Postojni (Gregorčičev drevored 2a, Postojna).
- Prosimo, da PowerPoint predstavitev **oddete organizatorjem** v odmoru pred začetkom tematskega sklopa, v katerem imate predstavitev.
- Dolžina predavanja je omejena na 15 minut (12 minut za govor in 3 minute za razpravo). Vabljeni predavanja so omejena na 30 minut. Prosimo vas, da se strogo držite predpisanega časa!

Posterji

- Velikost posterjev: obvezen največji format je A0 – 841 x 1189 mm (pokončna lega).
- V začetku predstavitve posterjev bo potekala hitra predstavitev v obliki diapozitivov. Pri tem vse avtorje vabimo k pripravi 2 minuti dolge predstavitve - napovednika (1–2 diapozitiva), v kateri pritegnete pozornost na vsebino posterja. Hitri predstavitvi bo sledil klasičen ogled posterjev, kjer bodo avtorji lahko odgovarjali na morebitna vprašanja udeležencev.
- Posterje in kratke predstavitve (.ppt, .pdf) pustite pri mizi za prijavo udeležencev, in sicer v ponedeljek, 17. junija, do odmora za kosilo.
- Med ogledom posterjev stojte poleg svojega posterja.

Obroki

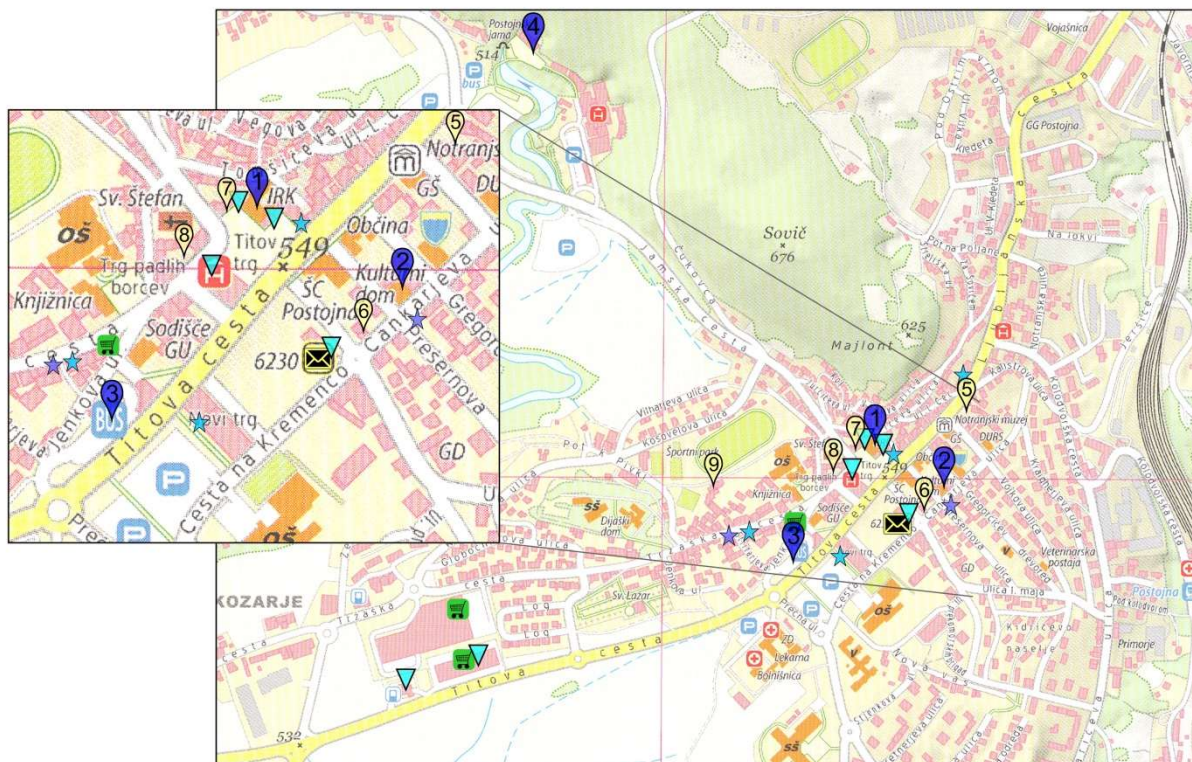
- Kosilo med predavanji in popoldanskim terenskim delom (torek in sredo) ni organizirano.
- Med celodnevnim terenskim delom (četrtek in petek) organiziramo enostavne obroke. Zaradi dolžine četrtekove in petkove ekskurzije (Ekskurzija C in D) priporočamo, da si s sabo vzamete še kakšen dodaten prigrizek.
- Odmori za kosilo so v času predavanj (ponedeljek, torek in sredo) vključeni v program. Jeste lahko v Štorji pod stopnicami, Bar Boru, Pri kaminu, v Čuku, Bistro Perspektiva, itd.
- V četrtek je v večernem delu programa planirana pogostitev.

Strokovne ekskurzije

- Vse ekskurzije, razen torkove, bodo kombinirane z avtobusno vožnjo ter hojo (nekaj km/dan).
- Prijave za strokovne ekskurzije bodo mogoče le še v ponedeljek, 17. 6. 2024 pri mizi za prijavo udeležencev.
- Odhod avtobusov je z glavne avtobusne postaje Postojna (označeno s št. 3 na karti Postojne).
- Zaradi predvidenih obiskov jam je obvezna primerna oprema (pohodni čevlji, terenska oblačila, svetilke). Na vseh ekskurzijah pričakujemo precej hoje. Pripravite se tudi na možno vročino ali/in dež. Na ekskurzijah bomo veliko hodili – bodite pripravljeni.
- Priporočamo uporabo repelentov proti insektom. Hodili bomo po območjih, kjer se nahajajo populacije klopov (*Ixodes ricinus*), ki so lahko prenašalci povzročiteljev lymške borelioze ali meningitisa.
- Udeležba na terenskem delu je prostovoljna in na lastno odgovornost. Organizator ne prevzema odgovornosti za morebitne izgube, škodo, poškodbe ali smrtne primere, ki bi nastali v povezavi s terenskim delom. Udeležencem svetujemo, da si pred odhodom na terensko delo uredijo ustrezno zavarovanje. Udeleženci so tekom terenskega dela dolžni upoštevati navodila organizatorja.

MAP OF POSTOJNA

ZEMLJEVID POSTOJNE



- 1 Karst Research Institute ZRC SAZU / Inštitut za raziskovanje krasa ZRC SAZU
- 2 Cultural Center of Postojna / Kulturni dom Postojna
- 3 Postojna bus station / Avtobusna postaja Postojna
- 4 Entrance to cave Postojnska jama / Vhod v Postojnsko jamo

Places to eat: / Možnost prehrane:

- 5 Pizzeria and restaurant „Minutka“ / Picerija in restavracija „Minutka“
- 6 Bistro „Štorja pod stopnicami“ / Bistro „Štorja pod stopnicami“
- 7 Restaurant „Proteus“ / Restavracija „Proteus“
- 8 Bistro „Bar Bor“ / Bistro „Bar Bor“
- 9 Pizzeria and restaurant „Čuk“ / Picerija in restavracija „Čuk“

- ★ Fast Food / hitra prehrana
- ★ Bakery / pekarna
- 🛒 Market / trgovina
- 🏦 ATM / bankomat
- ✉ Post Office / pošta

INVITATION TO A SPECIAL SESSION: KARST JAM

(Monday, 17th June 2024)

This year's school will be as always a great meeting point between experienced and new researchers from different parts of the globe.

In the past, a Special Session on Mysteries in Karst science was held which was a successful way to present open research questions and ideas in a form of a short PPT presentation.

This year, for the second time, we will hold a "Karst Jam" session, where a debate will be challenged by the moderator and attendees, where different karst topics will be addressed. The idea is to talk about some open/unresolved/ambiguous/problematic topics in a friendly environment with a lot of fun. Young researchers and students will get the possibility to hear both (or several) answers to the unresolved questions within karst science, where recognized scientists will get the possibility to mingle.

No contribution is needed, just your presence, goodwill and constructive ideas.

See you on Monday, 17th of June in the evening at the Karst Research Institute ZRC SAZU!

POVABILO NA POSEBNO SEKCIJO: KRAŠKE DEBATKE

(ponedeljek, 17. junija 2024)

Letošnja šola bo kot vedno odlično stičišče izkušenih in novih raziskovalcev iz različnih koncev sveta.

V preteklosti je potekala posebna sekcija o skrivnostih krasoslovja, ki je bila uspešen način za predstavitev odprtih raziskovalnih vprašanj in idej v obliki kratke PPT predstavitve.

Letos bomo že drugič vpeljali sekcijo "Kraške debatke", kjer bo debata potekala s pomočjo moderatorja in udeležencev, kjer bodo obravnavane različne kraške teme. Ideja je, da se o nekaterih odprtih/nerešenih/dvoumnih/problematičnih temah pogovarjamo v prijaznem okolju z veliko zabave. Mladi raziskovalci in študentje bodo imeli možnost slišati oba (ali več) odgovorov na odprta krasoslovna vprašanja, kjer bodo dobili možnost druženja s priznanimi krasoslovci.

Prispevek ni potreben, le vaša prisotnost, dobra volja in konstruktivne ideje.

Se vidimo v ponedeljek, 17. junija zvečer na Inštitutu za raziskovanje krasa ZRC SAZU!