

Conference program

SUNDAY 29 AUG : Karst Research Institute

17:00 and ongoing **Registration**

19:00 and ongoing **Welcome reception sponsored by the Municipality of Postojna**

MONDAY 30 AUG : Conference venue Jamski Dvorec

8:00 and ongoing **Registration, poster hanging**

9:00 10:00 **Opening ceremony**

Mr. Matjaž Berčon, Director

Turizem Kras, Conference Host

prof. Giuseppe Messina

President of the International Society of
Subterranean Biology

dr. Roko Žarnić, Minister

Slovenian Ministry of the Environment and
Spatial Planning

10:00 10:50 **Opening lecture**

Sket, B.

Subterranean fauna of the wider Dinaric area –
from first discoveries to a global hotspot and its
up-to-date biological evaluation

10:50 11:20 **Coffee break**

Introductory lectures to special symposium: Superficial Subterranean Habitats

11:20 12:00 Culver, D. C.*, Pipan, T.

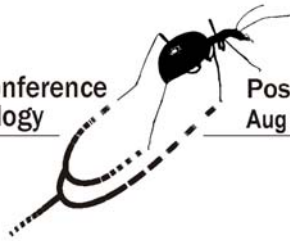
Shallow subterranean habitats – gateway to the
subterranean realm

12:00 12:20 Hahn, H. J.*, Bork, J., Schmidt, S. I.

What is groundwater? A new approach, and
what this means to fauna

12:20 13:00 Humphreys, W.* , Guzik, M., Bradford, T.,
Cooper, S., Austin, A., Leijns, R.,
Watts, C.

Groundwater calcretes: sheets of subterranean
habitat scattered on an Archaean landscape



MONDAY 30 AUG : Conference venue Jamski Dvorec, continued

13:00 **14:00** **Lunch**

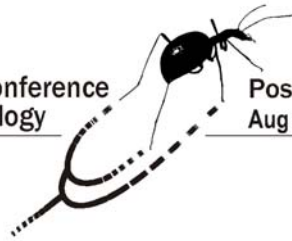
Introductory lectures to special symposia: Microbiology and Geomicrobiology; Adaptation, Development, Physiology; Annelida; Countdown 2010 and Conservation

14:00	14:20	Paoletti, M. G.	A newly discovered cave foodweb: the <i>Cansiliella</i> story
14:20	15:00	Jeffery, W. R.	Pleiotropic tradeoffs between constructive and regressive traits during troglomorphic evolution
15:00	15:20	Martínez-Ansemil, E., Sambugar, B.*	Annelida, an often neglected component of groundwater ecosystems
15:20	15:40	Eberhard, S.	Impacts of Climate Change on Stygofauna in Southwest Western Australia

15:40 **16:10** **Coffee break**

Introductory lectures to special symposia: Patterns and Processes in Subterranean Biodiversity; Subterranean Beetles

16:10	16:30	Porter, M. L.*, Culver, D. C.	Tethyan distribution of stygobionts: fact or fiction
16:30	16:50	Zagmajster, M.	Distribution and patterns in terrestrial subterranean fauna
16:50	17:10	Schuldt, A., Drees, C., Drescher, N., Schäfer, K., Assmann, T.*	What determines subterranean ground beetle diversity in the West Palaearctic? A macroecological approach using country-based distribution data (Coleoptera: Carabidae)
17:10	17:50	Casale, A.	From <i>Anopthalmus schmidti</i> to molecular phylogenies: past and present in the knowledge of subterranean carabid beetles (Coleoptera: Carabidae)
17:50	19:00	Break, poster hanging	ISSB Council Meeting
19:00	20:00	Visit to Postojna Cave	



TUESDAY 31 AUG : Conference venue Jamski Dvorec

8:00 and ongoing **Registration, poster hanging**

SPECIAL SYMPOSIA 1

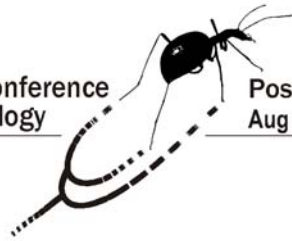
Superficial Subterranean Habitats

8:30	8:50	Pipan, T.*, Culver, D. C., Simon, K. S.	Organic carbon in aquatic shallow subterranean habitats
8:50	9:10	Marmonier, P.*, Navel, S. , Piscart, C., Chauvet, E.	Particulate organic matter breakdown in shallow interstitial habitat of a rural stream
9:10	9:30	Gottstein, S.*, Žgane, K., Cetin Krnjević V., Popijač, A.	Life history traits of the epigeal populations of <i>Niphargus dalmatinus</i> (Crustacea: Amphipoda) along the Cetina River, Croatia
9:30	9:50	Fong, D. W.*, Kavanaugh, K. E.	Population dynamics of the stygobiotic amphipod crustacean <i>Stygobromus tenuis potomacus</i> and isopod crustacean <i>Caecidotea kenki</i> at a single hypotelminorheic habitat over a two-year span
9:50	10:10	Meleg, I. N.*, Fiers, F., Kelemen, B., Popescu, O., Moldovan, O. T.	Heterogeneous copepod distribution in different groundwater habitats from northwestern Romania
10:10	10:30	Papi, F.*, Pipan, T., Culver, D. C.	Ecological studies of an epikarst community in Alpine cave Snežna jama na planini Arto: preliminary results

SPECIAL SYMPOSIA 2

Phylogeography and Phylogeny

Kornobis, E.*, Pálsson, S.	Phylogeny of Crangonyctoidea: taxonomic status and origin of groundwater amphipods, endemic to Iceland, based on two nuclear genes
Leijs, R.	Evolution of chiltoniid amphipods from subterranean and surface habitats in Australia
Abrams, K.*, Guzik, M., Cooper, S., King, R., Austin, A.	Systematics and phylogeography of Australian Parabathynellidae (Crustacea: Bathynellacea)
Baratti, M.*, Messana, G., Filippelli, M., Sket, B.	New biogeographical and phylogenetic data about the genus <i>Sphaeromides</i> and its relatives (Crustacea: Isopoda: Cirolanidae)
Verovnik, R.*, Stoch, F., Sket, B.	Phylogeny of the Western taxa of the genus <i>Monolistra</i> (Crustacea: Isopoda: Sphaeromatidae)
Lukić-Bilela, L.*, Pleše, B., Bruvo-Madžarić, B., Imešek, M., Bilandžija, H., Četković, H.	The mitochondrial genome analysis of the unique cave dwelling sponge <i>Eunapius subterraneus</i> Sket & Velikonja, 1984 (Porifera: Spongillidae)



TUESDAY 31 AUG : Conference venue Jamski Dvorec, continued

10:30 11:00 Coffee break

Superficial Subterranean Habitats, continued

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|-------|-------|---|---|
| 11:00 | 11:20 | Juberthie, C. | Mesovoid shallow substratum (MSS) |
| 11:20 | 11:40 | Novak, T. *,
Perc, M.,
Janžekovič, F. | Candidates for superficial subterranean habitats and epikarst among terrestrial cave inhabiting species |
| 11:40 | 12:00 | Oromí, P. *,
López, H.,
Manhert, V. | Diversity and allopatric distribution in the Canarian MSS: a case study in an old island |
| 12:00 | 12:20 | Růžička, V. | Central European spiders adapted to life in subterranean habitats |

Phylogeography and Phylogeny, continued

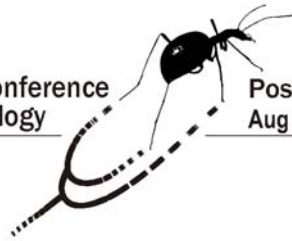
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| Allegrucci, G. *,
Trucchi, E.,
Sbordoni, V. | Patterns of speciation in <i>Dolichopoda</i> cave crickets (Orthoptera, Rhaphidophoridae) |
| Mugue, N. | Caucasus and vicinity: comparative phylogeography of Ponto-Caspian and subterranean crustaceans |
| Jugovic, J. *,
Prevorčnik, S.,
Blejec, A.,
Sket, B. | Linking molecular phylogeny to morphological evolution in <i>Troglocaris</i> (Crustacea: Decapoda: Atyidae) |
| Zakšek, V. *,
Sket, B.,
Trontelj, P. | Phylogeography of the cave shrimp <i>Troglocaris</i> s. str.: a basis for a comparative phylogeography of Dinaric subterranean fauna |

Patterns and Processes in Subterranean Biodiversity

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|-------|-------|--|--|
| 12:20 | 12:40 | Eberhard, S. *,
Stevens, N.,
Perina, G.,
Bell, P. | Troglofauna in the Pilbara region, Western Australia – Patterns in diversity and distribution, and sampling considerations for conservation assessment |
| 12:40 | 13:00 | Halse, S. | Distribution patterns of different groups of troglofauna in the Pilbara region, Western Australia: are arachnids the most restricted troglofauna? |

Phylogeography and Phylogeny, continued

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| Palandačić, A. *,
Zupančič, P.,
Matschiner, M.,
Snoj, A. | Genetic evidence of subterranean migration of imotska gaovica <i>Delminichthys adspersus</i> (Pisces: Cyprinidae) |
| Strecker, U. *,
Wilkens, H. | Problems of taxonomy in Mexican <i>Astyanax</i> |



TUESDAY 31 AUG : Conference venue Jamski Dvorec, continued

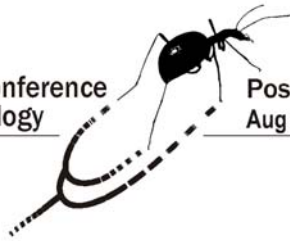
13:00 14:00 Lunch

Patterns and Processes in Subterranean Biodiversity, continued

Systematics and Faunistics

14:00	14:20	Berkhoff, S.E.* , Matzke, D., Fuchs, A., Bork, J., Hahn, H. J.	Recording the stygofauna of the federal state of Sachsen-Anhalt, Germany	Sidorov, D. A.	Pseudocrangonyctidae (Crustacea: Amphipoda) and its forming pathways
14:20	14:40	Moldovan, O. T.* , Meleg, I., Perşoiu, A.	Habitat fragmentation and its effects on groundwater populations	Semenchenko, K. A.	Water mites (Hydrachnidia) from interstitial habitats of the Russian Far East and their relationship with faunas of adjacent lands
14:40	15:00	Bork J.* , Fuchs A., Barufke K. P., Hahn H. J.	Nine years of long-term stygofauna monitoring in Southwest Germany	Eberhard, S., Moulds, T.*	Review of the Subterranean Biodiversity of the Nullarbor Plain, Southern Australia
15:00	15:20	Stein, H.* , Berkhoff, S., Matzke, D., Hahn, H. J.	Spatial distribution patterns of faunal groundwater communities across Germany	Deharveng, L.* , Tian, M., Li, Y., Bedos, A.	Invertebrate biodiversity of the Guangxi caves (southern China)
15:20	15:40	Stoch, F.* , Gasparo, F.	Regional species richness and diversity patterns of obligate cave-dwelling fauna in the Classic Karst in Italy	Drescher, N., Loos, L., Levanony, T., Dayan, T., Schuldt, A., Schäfer, K., Assmann, T.*	Unexpected rich terrestrial subterranean fauna in Israel: first results from the inventory of 13 caves
15:40	16:00	Lopes Ferreira, R.* Souza Silva, M.	The cave lithology determining the structure of the cave invertebrate communities in the Brazilian Atlantic Rain Forest	Subhash Babu, K. K , Bijoy Nandan, S.*	The Hypogean fauna of selected ecosystems of Kerala, India with two new records

16:00 16:30 Coffee break



TUESDAY 31 AUG : Conference venue Jamski Dvorec, continued

Patterns and Processes in Subterranean Biodiversity, continued

Systematics and Faunistics, continued

16:30	16:50	Bedek, J.	Data analysis of spatial distribution of cave terrestrial isopods (Isopoda: Oniscidea) in Croatia	Kováč, L. *, Luptáčik, P., Papáč, V., Mock, A., Mourek, J.	Contribution to morphology of paligrade <i>Eukoenia spelaea</i> (Peyerimhoff, 1902) and its distribution in the Western Carpathians
16:50	17:10	Maurice, L. *, Robertson, A., Bloomfield, J., Allen, D.	Spatial variations in stygobite distributions in the English Chalk	Mock, A.	Terrestrial isopods and millipedes in Slovak caves: results of long-term exploration
17:10	17:30	Short movie	Mlinar, C.		The aquatic life of the Postojna-Planina Cave System
17:40	19:00	Poster Session I			
19:10	20:00	Visit to Vivarium Proteus for first group			

WEDNESDAY 1 SEP : MID-CONFERENCE EXCURSION

THURSDAY 2 SEP : Conference venue Jamski Dvorec

8:00 and ongoing **Registration, poster hanging**

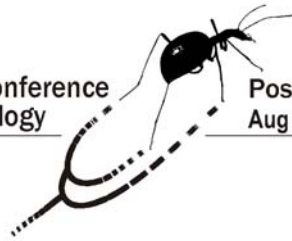
SPECIAL SYMPOSIA 3

SPECIAL SYMPOSIA 4

Countdown 2010 and Conservation of Subterranean Life

Adaptation, Development, Physiology

8:30	8:50	Souza Silva, M. *, Parentoni Martins, R., Lopes Ferreira, R.	Conservation of cave invertebrates and study of impacts on caves located in the Brazilian Atlantic rain forest	Šustr, V. *, Nováková, A., Lukešová, A., Vošta, O.	Feeding biology of the cave isopod <i>Mesoniscus graniger</i> (food preference and digestive enzymes)
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THURSDAY 2 SEP : Conference venue Jamski Dvorec, continued

8:50	9:10	Muriel-Cunha, J.*, Cardoso, N. A., Martinelli Filho, J. E., Gutemberg, G., Albino, U.	Biospeleological research in the Amazon: the case of Planaltina cave at ecoregion Xingu-Tapajós, Brazil	Vittori, M.*, Žnidaršič, N., Štrus, J.	The gland-piliferous organs of <i>Titanethes albus</i> (Crustacea: Isopoda)
9:10	9:30	Dravec, L., Kostelić, B.*, Mandić, A.	Protection of speleological objects in the region of Istria through the European Union projects	Lipovšek, S.*, Novak, T., Janžekovič, F., Pabst, M. A.	Role of the fat body in the cave crickets <i>Troglophilus cavicola</i> and <i>T. neglectus</i> (Rhaphidophoridae, Saltatoria) during overwintering
9:30	9:50	Ozimec, R.*, Polak, S., Bedek, J., Zakšek, V.	Biospeleological component of the project KUP (Karst Underground Protection) in Istra Peninsula	Antolinc, E.*, Janžekovič, F., Perc, M., Novak, T.	Cold-hardiness in central European troglaphiles and troglonexes
9:50	10:10	Ipsen, A.	How efficient are the non invasive protection measures in the Segeberg Cave in Northern Germany for the population of bats and subterranean beetles	Trajano, E.*, Herrero, J.C.H., Menna-Barreto, L.	Chronobiological studies on Brazilian subterranean fishes: a summary and new data on locomotor activity rhythms under light-dark cycles
10:10	10:30	Susac, R. A. J.*, Anderson, J., Moulds, T. A.	Comparisons of subterranean biodiversity from the West Kimberley Karst, Australia	Aljančič, G.	Fifty years of Tular Cave Laboratory

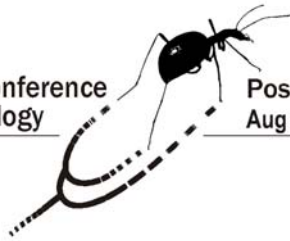
10:30 11:00 Coffee break

Coffee break

Countdown 2010 and Conservation of Subterranean Life, continuing

Adaptation, Development, Physiology, continuing

11:00	11:20	Dvorščak, K.	History of the presentation of the proteus (<i>Proteus anguinus</i>) in Postojna Cave	Karaman, I.*, Ozimec, R.	New long-legged cave-dwelling representatives of the Balkan genus <i>Cyphophthalmus</i> (Opiliones, Cyphophthalmi, Sironidae) and the question of functional significance of troglobite appendage elongation
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THURSDAY 2 SEP : Conference venue Jamski Dvorec, continued

11:20	11:40	Goater, S.*, Gardner, A., Knott, B.	Are Stygofauna Really Protected in Western Australia?	Zacharda, M.	Troglophormisms in Rhagidiidae (Acari: Prostigmata): are they all a morphological clock of adaptation ?
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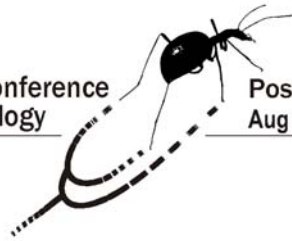
Countdown 2010 and Conservation of Subterranean Life, continuing

Subterranean Aquatic Annelida

11:40	12:00	Beltram, G.*, Sket, B.	Subterranean habitats as Wetlands of International Importance	Martínez, A.*, Kvindebjerg, K., Worsaae, K.	Annelid diversity in anchialine systems: unique adaptations and functional morphology of <i>Protodrilus</i> n. sp. to the cave environment of La Corona lava tube (Canary Islands, Lanzarote)
12:00	12:20	Reboleira, A. S. P. S.*, Gonçalves, F., Oromí, P.	Subterranean biology of mainland Portugal: historical review and new insights	Dumnicka, E.	Stygobiontic oligochaetes in Poland with remarks on their occurrence and distribution in Central Europe
12:20	12:40	Semikolennykh, A.*, Rakhleeva, A., Poputnikova, T.	An environmental impact assessment of spent calcium carbide disposal in caves and mines	Achurra, A.*, des Châtelliers, M. C., Rodriguez, P.	Molecular and morphological analyses reveal the presence of two species in the stygobiont oligochaete <i>Troglo-drilus</i> <i>galarzai</i>
12:40	13:00	Fajdiga, B., Stupar, M.*	Subterranean protection starts on the surface	Giani, N.*, Sambugar, B., Martínez- Ansemil, E., Martin, P., Schmelz, R.	Groundwater oligochaetes (Annelida, Clitellata) of Slovenia

13:00 14:00 Lunch

Lunch



THURSDAY 2 SEP : Conference venue Jamski Dvorec, continued

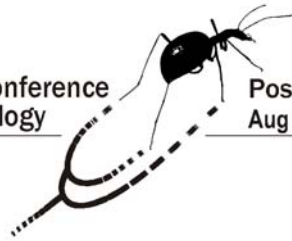
Microbiology and Geomicrobiology

**Evolution and Systematics of
Subterranean Beetles**

14:00	14:20	Silva Taylor, E. L.* , Lopes Ferreira, R., Aparecida de Resende Stoianoff, M.	Microbiological study for a management plan in a touristic cave in Brazil	Giachino, P. M.	From the cavernicolous to the subterranean concept: past and present in Leptodirinae (Coleoptera, Cholevidae)
14:20	14:40	Nováková, A.	Cave microscopic fungi as food source for caves inhabiting springtails and some microfungus records	Vrezec, A.*, Kapla, A.	The influence of aboveground invasions on the diversity and distribution patterns of subterranean carabids (Carabidae)
14:40	15:00	Tkavc, R.*, Sonjak, S., Gunde- Cimerman, N.	Entomopathogenic fungi associated with two troglomorphic moths <i>Scoliopteryx libatrix</i> L. and <i>Triphosa dubitata</i>	Fresneda, J., Grebennikov, V. V., Ignacio Ribera, I.*	The geographic and phylogenetic limits of Leptodirini
15:00	15:20	Hermosin, B., Nováková, A., Jurado, V., Laiz, L., Porca, E.*, Rogerio, M. A., Sanchez-Moral, S., Saiz-Jimenez, C.	Microbial Observatory of Spanish Caves: Assessing the origin of fungal outbreaks	Polak, S.	Suprageneric systematics of leptodirine beetles (Leiodidae, Cholevinae): molecular versus morphological characters
15:20	15:40	Brannen, K. M.*, Summers Engel, A., Birdwell, J. E.	Creating humic matter indices for the interpretation of ecosystem energetics	Friedrich, M.*, Rai, P., Barret, R., Daine, B., Chen, R.	The blind cave beetle that isn't: histological, behavioral and molecular evidence of functional photoreceptors in <i>Ptomaphagus hirtus</i>
15:40	16:00	Mulec, J.*, Walochnik, J.	Airborne microorganisms and relation to atmospheric parameters in big cave systems (Postojnska jama, Slovenia)	Michel Perreau, M.	What does palaeontology reveal on the radiation of Leiodidae, Cholevinae and their colonisation of the subterranean biotopes?

16:00 16:30 Coffee break

Coffee break



THURSDAY 2 SEP : Conference venue Jamski Dvorec, continued

Microbiology and Geomicrobiology, continuing

Evolution and Systematics of Subterranean Beetles, continuing

16:30	16:50	Pašić, L.* , Kovče, B., Sket, B., Herzog-Velikonja, B., Porca, E., Jurado, V., Saiz-Jimenez, C.	Diversity of microbial communities colonizing the walls of a Karstic cave in Slovenia	Hauser, B.	Leo Weirather (1887-1965) revisited
16:50	17:10	Zakotnik, T., Mulec, J., Turk, V., Avguštin, G., Stres, B.*	Composition and activity of bacterial microbial communities in the Postojna cave sediments: are the microbes in 700 000 years old sediments still active?	Pavičević, D.* , Ozimec, R.	First finding of the troglobitic genus Seracamaurops (Coleoptera, Staphylinidae, Pselaphinae) for Croatia
17:10	17:30	Short movie	Lukić, M.* , Bedek, J.	Behavior of Cave Fauna	
17:40	19:00	Poster Session II			
19:10	20:00	Visit to Vivarium Proteus for second group			

FRIDAY 3 SEP : Conference venue Jamski Dvorec

8:00 and ongoing **Registration**

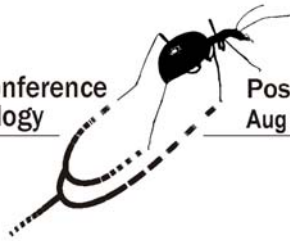
8:40 **9:00 In Memoriam**

Marmonier, P.
Latella, L.

Janine Gibert (1945-2009)
Sandro Ruffo (1915-2010)

New Models, Methods, and Concepts for Subterranean Biology

9:00	9:40	Douady, C. J.* , Malard, F., Konecny, L., Morvan, C., Colson-Proch, C., Calvignac, S.	A new phylogenetic framework to decipher evolutionary processes involved in groundwater
9:40	10:00	Morvan, C.* , Konecny, L., Malard, F., Douady, C. J.	Is stygobiont diversification a consequence of extrinsic factors?



FRIDAY 3 SEP : Conference venue Jamski Dvorec, continued

10:00	10:20	Malard, F.* , Konecny, L., Magniez, G., Douady, C.	The large distribution ranges of northern stygobiotic species of Proasellus (Isopoda): a test of cryptic diversity.
10:20	10:40	Avguštin, G.* , Gramc, S., Bizjak Mali, L., Bulog, B., Ambrožič Avguštin, J.	The structure and diversity of the microbial community inhabiting the hind gut of the olm (<i>Proteus anguinus</i>)

10:40 11:10 Coffee break

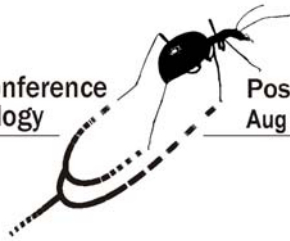
New Models, Methods, and Concepts for Subterranean Biology, continuing

11:10	11:30	Prevorčnik, S.* , Trontelj, P., Sket, B.	Rapid re-invasion and evolution following the mysterious disappearance of Racovitza's <i>Asellus aquaticus cavernicolus</i> (Crustacea: Isopoda: Asellidae)
11:30	11:50	Konec, M.	Microsatellites as new tools to study the evolution of subterranean crustaceans
11:50	12:10	Fowler, R.	Quantitative Real-Time PCR as a tool for the quantification and characterization of microorganisms in caves and karst aquifers: Phytoplankton, lampenflora, bacterial communities, and fecal source tracking
12:10	12:30	Moškrič, A.	A bioinformatic quest for phylogenetic resolution: adding new nuclear genes to the <i>Niphargus</i> supermatrix
12:30	12:50	Trajano, E.	Source <i>versus</i> sink populations concept applied to The Schiner-Racovitza classification of subterranean organisms

13:00 14:00 Lunch

New Models, Methods, and Concepts for Subterranean Biology, continuing

14:00	14:20	Slay, M. E.* , Fong, D. W.	Preliminary estimates of species detection probabilities for North American troglobionts
14:20	14:40	Turjak, M.* , Trontelj, P.	A new tree-based method for the quantitative analysis of phylogenetic character patterns: a case study with <i>Niphargus</i> (Amphipoda; Crustacea)
14:40	15:00	Flot, J. F.* , Bauermeister, J., Dattagupta, S.	<i>Niphargus</i> amphipods and their <i>Thiothrix</i> ectosymbionts in Frasassi (central Italy): a tale of multiple invasions and host specificity



FRIDAY 3 SEP : Conference venue Jamski Dvorec, continued

15:00	15:20	Fišer, C.*, Trontelj, P.	Adaptive morphology of subterranean amphipod communities
15:20	15:40	Lopes Ferreira, R.	Translocation of Cave fauna in Brazilian Iron ore cave
15:40	16:00	Coffee break	
16:00	16:20	Conference Close Presentation of next conference venue	
17:00	19:00	General Assembly of the International Society for Subterranean Biology; Meeting of the new Council	
20:00	Conference dinner		