

# The newsletter of the European Society of Arachnology

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Secretariat of the European Society of Arachnology  
Department of Molecular Biology and Genetics, Democritus University of Thrace  
Dimitras 19, 68100 Alexandroupolis, Greece  
E-mail: maria.chatzaki@gmail.com

Editor: Marco Isaia, E-mail: marco.isaia@unito.it  
Co-editor: Sara Goodacre, E-mail: sara.goodacre@nottingham.ac.uk



## From the President

By Wolfgang Nentwig

Dear Members of our Society,  
those who participated in the 30th European Congress of Arachnology in Nottingham, United Kingdom, will agree with me that it was a great congress. Perfectly organized by Sara Goodacre, Dmitri Logunov and their team, we were happy to be back, after 20 years absence from the UK, in one of the founder countries of European arachnology. Thank you very much for this wonderful event! Those who did not participate in this congress will have another chance at the next congress, 2018 in Hungary, to meet the large arachnology family.

The 3-year-period of three members of the ESA Council ended this year. They decided to continue and were all re-elected by the ESA members in Nottingham. Maria Chatzaki (media secretary), Ferenc Samu (Facebook) and Holger Frick (webmaster) have done a wonderful job during the last 3 years and I am happy that they will now continue for a further period of time. Thank you! Efrat Gavish-Regev has had the responsibility for many years to serve as membership secretary. She has decided to step back from this role and her duties have been taken up by Jason Dunlop. Efrat has served our Society for a long period and I take this opportunity to thank her very much for all that she has done.

With Jason as the new membership secretary, he gave up his position as Vice-President. We convinced Sara Goodacre that she would be an ideal next vice-president and she accepted, fortunately. All other responsibilities remain unchanged. Christian Kropf is treasurer, Marco Isaia and Sara Goodacre organize the annual Newsletter, Gabriele Uhl is in charge of special affairs. Thank you all for the excellent work you provided for our Society.

Amongst other good news from our Society is the fact that the ESA is growing continuously. We currently have more members than we have ever had in the past (212), among them 190 paying members. I should, however, say “theoretically paying” because this refers to our major problem. Many members are not aware of the financial contribution to the European Society of Arachnology, i.e. the annual fees they have accepted to pay. As explained at the Nottingham meeting, this weak payment mentality may cause serious problems to our Society. So, please check at our website ([www.european-arachnology.org](http://www.european-arachnology.org)) via your personal member login your account. Paying the remaining fees is very easy with PayPal and you would increase the happiness not only of our treasurer and membership secretary but of all those who benefit from the different supportive roles that the Society offers. Please pay your membership fees for the years you did not pay so far because the Society needs all our support. Of course, I add here also a “thank you so much” to all who paid their fees regularly.

My personal wish for the next 12 months? (As you know, also presidents have one wish for free!) More activities among the ESA members. Please use our mailing service for getting in contact with all members of the Society. Are you looking for a job or (luckily) can offer a position? Can you offer/ do you need material? Do you have arachnological books or journals that are no longer needed? Can you make an attractive offer to others to collect items at one of your next excursions to remote areas? Are you running workshops, or do you have information on new techniques? I am sure there is much more that we can communicate. Please, just write a mail to Maria, our media secretary, and she will be happy to spread it to all.

Wolfgang Nentwig  
President of the European Arachnological Society



## Congress Report

By Marco Isaia and Sara Goodacre

Photos by: Christian Komposch

The 30th European Congress of Arachnology was hosted by Sara Goodacre at the University of Nottingham, UK. Sara was supported by a fantastic team of colleagues: Dmitri Logunov, Geoff Oxford, Tony Russell-Smith, Yuri Marusik, Leah Ashley, Tom Coekin, Ella Deutsch, Rowan Earlam, Alastair Gibbons, David Harvey, Antje Hundertmark, Liaque Latif, Michelle Strickland, Emma Vincent, Sarah Goertz and Michelle Strickland.

The congress began in the evening of August 20<sup>th</sup> with an informal welcome reception in the congress venue. The congress was hosted in the beautiful Nottingham University Campus, surrounded by green parks and nice gardens, lawns and willow trees. Many of the delegates were staying at the Georgian-Gothic style Hugh Stewart Hall of Residence, where most of the social events of the Congress took place.

The congress was attended by 109 participants (including 4 accompanying persons) from 27 countries. The countries represented Europe (UK, Spain, Denmark, Germany, Belgium, Greece, Poland, Czech Republic, Lichtenstein, Switzerland, Finland, Austria, Netherlands, Sweden, Slovenia, Hungary, Serbia, Russia), Asia (Israel, Sri Lanka, Japan, Pakistan), Oceania (New Zealand), Africa (South Africa, Algeria), Americas (Brazil, USA).



The congress logo of the 30<sup>th</sup> European Congress of Arachnology was designed by Michelle Strickland, inspired by one the most popular Nottingham legend of Robin Hood.

Our host, Sara Goodacre, opened the conference and an opening address was also given by the Mayor of Nottingham. The Mayor welcomed the participants with a brilliant talk spiced up with English humor - and an East Midlands English accent as well. After the formal salutations, Torbjörn Kronestedt and Christian Komposch presented a nice selection of photos, taken both from old and recent editions of the Congress, starting from the very first congress in 1960 (18 participants, Bonn, Germany) to the very last one, in 2015 (170 participants, Brno, Czech Republic).

It was nice to remember the old ESA days, and many people in the audience were really touched by the “serious” part (we will leave you to guess who spoke during the most serious part: Chri or Torbjörn?).

The scientific program itself was split over four days of talks, and comprised 4 plenary talks, 72 oral presentations, 44 posters that encompassed a wide breadth of arachnological research, with 19 thematic sessions (17 for oral presentations and 2 poster sessions) in addition to two special symposia. A wide range of contributed talks followed each plenary, many of which were given by students. The talks were split into subject areas such as behavioral ecology, taxonomy, phylogeny, databases and engagement, silk, diversity, faunistics, biogeography, evolution, bionomics and mimicry, cytology and infections, morphology and physiology. Particular focus on the predatory effects of spiders and spider recording schemes was given in two special symposia, organized by Ferenc Samu and Tony Russell-Smith, respectively.

The hosts ensured a great program of evening entertainments that began with a BBQ on the evening of the first day. The second evening saw a night of Pub crawling in some of the Nottingham finest pubs. The Russian Party was held on Wednesday, and finally, a traditional “Ceilidh” was held after the Conference dinner, on Thursday night.



The congress organizer, Sara Goodacre and the Hugh Stewart Hall of Residence within the Nottingham University Campus, the congress Venue.

## Arachnological Science

The plenary talks given throughout the conference illustrated the breadth of research covered at the meeting. Yael Lubin gave the first talk of the conference, presenting an interesting lecture about the “other spider societies” i.e. the colonial spiders, which are non-cooperative groups, sharing silk structures and exhibiting a very high level of behavioral flexibility. One of the most interesting sets of findings within Yael’s talk was that the benefits of group living increase with colony size and that the environment has a strong influence on this relationship. Moreover, Yael suggested that colonial spiders (she used colonial *Cyrtophora* as model organisms) exhibit a strong Allee effect in their



dispersal behavior and mating systems.

The first plenary presentation was followed by talks on behavioral ecology, including Marlis Dumke's talk on socially foraging spiders which was awarded the Best Student Talk of this year's Congress. Onno Preik (female choice mechanisms in *Argiope*), André Walter (subsocial spiders) and Peter Dolejš (reproduction and ontogeny in *Zorocrates*) completed the first session of the first day of the congress.



The opening session of the congress, in the Lecture Theatre of the Pope building.

The afternoon saw a session on taxonomy and phylogeny, in parallel with a session on database and engagement. The Taxonomy session was opened by a talk on nephilid phylogenomics (Matjaž Kuntner), followed by Christian Bonatto's talk on embryogenesis in *Parasteatoda tepidariorum* and Francisco Castro speaking about epiphyte dwelling spiders. The session was closed by Stefano Mammola, with a presentation on the aesthetic impact of *Brigittea civica*'s webs.

Wolfgang Nentwig introduced the database and engagement session, presenting new ideas about the future development of WSC and Araneae. Our two most important web resources are increasingly used by the scientific community (up to 1000 and 500 daily users per day), attesting to an increasing interest by the public in taxonomical research. Wolfgang also introduced us to the proposal for the creation of the new joint arachnological resource of VINST (Virtual Institute of Spider Taxonomy), which aims to encourage taxonomic research throughout Europe by providing PhD grants. After Wolfgang, the subjects covered in the session included gnaphosid systematics (Vladimir Ovtcharenko), mygalomorphs (Arthur Decae) and citizen science (Sarah Pierce).

Two more parallel sessions followed the coffee break. The taxonomy session, focused on Cyphophthalmi (Matyas Hiřman), Amblypygi (Michael Seiter), Erigoninae from East Asia (Shou-Wang Li) and spider parasitoids (Stano Korenko). A special symposium on predatory effects of spiders took place in parallel with the taxonomy session, with an introductory talk given by Ferenc Samu on the non-consumptive effects of spiders in biological

control. Radek Michalko (effect of Neem application on predatory activity of *Oxyopes*) and Roman Bucher (spider top-down control).

Tuesday's plenary was given by Fritz Vollrath, focusing on spider webs and their silk. Fritz provided an updated overview about the scientific advance on the understanding of one of the most fascinating topic related to spiders. Of particular interest was Fritz's description of silken 'windlasses', which is where sections of silk fibers spool around each other, thereby creating forces that act as a winch before unspooling and releasing the force. Fritz stressed in particular how webs rely on their silks for function and how the coevolution of structural engineering and filament performance has led to interesting material properties of the silk. The silk session included a further three talks focusing on ballooning spiders (Erica Morley), cribellate silk (Anna-Christin Joel) and *Argyroneta*'s silk (Michelle Strickland).

Following a coffee break there were parallel talks on subjects such as taxonomy (Yuri Marusik, Łucasz Trębicki, Nilani Kanesharatnam and Ilesha Ileperuma Arachchi) and diversity and faunistics (Robert Bosmans, Jesús Hernandez-Corral, Peter Koomen, Muhammad Ahsan). These all illustrated how much more there is to learn about spider diversity, both in the Mediterranean region and in the Asian countries, such as Sri Lanka, Malaysia and Pakistan.



Fritz Vollrath (Tuesday's plenarist) and a nice bunch of arachnologists sitting together during the congress dinner.

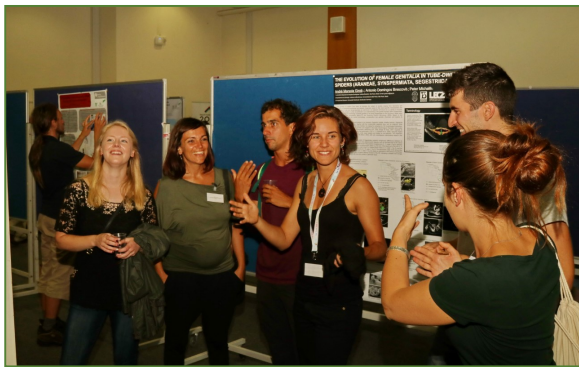
The afternoon session was taken by two more parallel sessions, one on diversity and faunistics, and the other on taxonomy and phylogeny.

The diversity and faunistic session opened with a talk (Marco Isaia) about the CAWEB research network and how cave arachnologists are helping in finding out about macroecological patterns of cave spider diversity across Europe. Stefan Foord (functional diversity of spiders in South African savannah), Yuri Marusik (Siberian steppes) and Asri



Leroy (spiders in city gardens) completed the session. The parallel session on taxonomy and phylogeny began with Cor Vink's talk on the spider fauna of New Zealand, followed by Richard Gallon (revision of South African *Harpactirella*), Sasanka Ranasinghe (phylogeny of oonopids) and Nusrat Majeed (DNA barcoding of jumping spiders).

The Biogeography session started just after lunch, with a talk on the spider diversity of Tanzania led by Jagoba Malumbres-Olarte, followed by Yuri Marusik (zoogeography), Igor Armiaich (Evippinae in Israel) and Christian Komposch (the replication of a study on Opiliones across an altitudinal transect 50 years after). The first poster session of the congress was scheduled just after this session of talks.



The first poster session took place on Tuesday.

The following day was 'Excursion day', which will be described further in the dedicated paragraph.

The keynote speaker of the fourth congress day was Alistair McGregor. Alistair focused primarily on arachnid evolution and development. Insight were mostly gained using the common house spider species *Parasteatoda tepidariorum*, which served as model to study the spider genome and the related developmental processes including maternal zygotic transitions, segmentation, patterning and neurogenesis.

Miquel Arnedo (radiation in the Canary island detected using DNA barcoding), Geoff Oxford (*Eratigena atrica* cryptic species) and Christoph Muster (cryptic species in *Micaria pulicaria*) composed the first session of the morning.

After the coffee break we gathered again in the main hall for the taxonomy session, starting with a talk about Hawaiian theridiids (Adrià Bantí), followed by a talk on spiders in a rice ecosystem (Abida Butt), a talk about insecticide resistance in spiders (Muhammad Mukthar) and another talk by Yuri Marusik, about Palpimanidae.

Just after the session, we moved to the location chosen for the congress photo: a hundred arachnologists throwing their Robin Hood hat up in the air, a very original congress photo, indeed!

The afternoon saw an interesting session about bionomics and mimicry, starting with Rebecca Wilson's talk on circadian rhythmicity in orb weaving spiders. The myrmecophagous spiders were the main subject of Ondřej Michálek's talk, while Stano Pekár gave us an interesting talk on golden mimicry. The session was closed by Jan Raška, whose talk on ladybird spiders was awarded with the third prize for best student talk of this year's congress.

The session on cytology and infections started out with Philip Steinhoff (who was the runner up for the Best Student presentation), who gave a fascinating talk on the brain of cave spiders. Alastair Gibbons (the pink flamingo of the Russian Party — see later notes!) gave a talk on intra and extra cellular microbes of spiders, followed by the talk of another congress volunteer, Antje Hundertmark, who focused on *Wolbachia* infections in *Nephila senegalensis*. Jana Plíšková closed the session with a talk on karyotype dynamics in the scorpion family Buthidae. The second poster session of the congress followed.

The last day of the congress was opened by the fascinating journey inside the nuptial gift-giving of male *Pisaura mirabilis*, a plenary talk given by Cristina Tuni. Cristina focused on this intriguing set of reproductive traits, uncommon in spiders, but very well known in her model species. She discussed both about laboratory and field surveys that shed light on the evolution and maintenance of this male trait, and how sexually antagonistic co-evolution has likely shaped this spiders' fascinating mating system.

Behavioral ecology was the subject of the session that followed Cristina's plenary. J. Andrew Roberts talked about wolf spiders' risk prone behavior, Lenka Sentenská about the sensory organ found in the male palp of an entlegyne spider and Victoria Smith closed the session with a nice talk about an inventive method to catch Idiopidae (the "beetling").

After the coffee break, we started the very last afternoon of the congress, with a session on Spider Recording Schemes introduced by Peter Harvey's talk on the Spider Recording Scheme in Britain. Greece, the French Mid-Pyrenees and Germany were the areas of interest of Maria Chatzaki's, Samuel Danflous's and Theo Blick's presentations that followed.





The discovery of *Pardosa pontica* in Iran by Yuri Marusik opened the following taxonomy session of the Congress, followed by Ejgil Gravesen (Greenland spiders), Konrad Wiśniewski (effect of fire managing of heathlands in Poland) and Ibrahim Salmand (spider communities of pomegranate orchards).

The very last session of the congress focused on spider venom, and was opened by Eva Liznarova providing insights on the venom of prey-specialized spiders compared to non-specialists. The last talk of the congress was given by Nicolas Langenegger, who focused on the proteases involved in the maturing of spider venom toxin precursors.

### *Spiders in wonderland (excursions and parties)*

There were three excursions, all organized by Gaynor England of 'Visit Nottinghamshire', who managed to coordinate the movements of more than 100 arachnologists all at once and still keep smiling! One of the excursions was to the village of Lambley, where a typically English country walk took place in an area known as the 'Dumbles'. Dumble is a local term for a small wooded dell through which streams have carved out twisting and steep-sided gullies. It seems that the participants on this excursion found more paths than perhaps was intended (=they got slightly lost at one point!) but eventually, after much walking through lovely countryside, they found themselves at a traditional English country pub where refreshments were awaiting them. Meanwhile, other delegates were on their way to Nottingham city centre, escorted by none other than Robin Hood himself. The city's castle, underground caves, and local 'Castle Rock Brewery' all featured on Robin's tour of the area, which gave participants a chance to learn about the history of this lovely city.



Looking for spiders in the Sherwood forest, one of the destinations of this year's mid conference excursion.

The final excursion was to Sherwood Forest, home to not only the legendary Robin Hood himself, but to one of England's oldest oak trees, known as the 'Major Oak'. This tree is around 900 years old, and sits in a nature reserve close to the village of Edwinstowe, where in summer you can find

exhibitions of medieval jousting and hunting with birds of prey. A walk to the oak was followed by English tea and cake in the grounds of Clumber Park country estate closeby. Thank you Gaynor – and thank you Robin – for giving us all a great day out.



Tuesday night all arachnologists gathered in the finest Nottingham's pubs.



Instead of vodka, the theme of this year's Russian Party was Alice in Wonderland, interpreted by the congress organizer, Sara Goodacre.



A "Ceilidh" with a traditional folk band playing live was held after the congress dinner.

We are happy to report that all delegates returned safe and sound from their adventures in time for the Russian party, which was held the same evening. The theme for this year was Alice in Wonderland's Tea party – and we think perhaps a tradition has been born! Yuri Marusik had, as usual, prepared a fantastic feast for us to eat, and there were the traditional delicious drinks also to accompany this, brought by the many delegates from all over the world. Thank you Yuri and thank you everyone! What could be better to accompany this than a pink



flamingo (yes really), a red queen (looking rather like the current curator of arachnids at London's Natural History Museum) and two mad hatters (looking suspiciously like Professors working on spiders from Greifswald and Hamburg)? We will leave it to the photographs, which always speak volumes, to have the final words – but our conclusion is that arachnologists have definitely not lost the ability to party!

### Award Ceremony

The audience celebrated the best students during the Award Ceremony, just after a well deserved coffee break. The student talks and posters were all of a very high standard and the judging committee had a difficult task to select winners. Marlis Dumke (Australia/Germany, First prize for Best Talk), Philip Steinhoff (Germany, Second Best Talk), Ian Raška (Czech Republic, Third Best Talk) and Jana Plíšková (Best Poster) were the winners of this year: congratulations!

### Thank you, England!

Our thanks go to the organizers of the congress – particularly Sara Goodacre – and all the volunteers for hosting us in Nottingham and taking care of us during the congress days. The huge round of applause at the end of the assembly says it all – thank you Sara and all the people involved for everything you have done.

### News from ESA general assembly

By Marco Isaia

The President (Wolfgang Nentwig) opened the General Assembly by reminding us of the Society's aims, which are to support European arachnological projects, to facilitate congress proceedings, to assist the attendance of students at meetings and to carry out the every-day functions of the council.

One minute of silence was devoted to arachnological colleagues who have died during since the last European Congress: Jan Buchar, Maria Rambla, Hans Hendrickx, Gerd Alberti. Wolfgang then communicated the results of the Council election. Ferenc Samu, Maria Chatzaki and Holger Frick were re-elected as part of the Council. Efrat Gavish-Regev decided to resign and, therefore, the membership is now administrated by Jason Dunlop (Berlin). The current number of members is 212 from 42 different countries.

The new membership policy has resulted in a better management of the membership issues and has led to a further increase in the number of paying

members from 128 of 2015, to 195 in 2016, to the current 212. The financial state of the society enables it to support of European projects such as 'Araneae Spiders of Europe', to give support to Congress Organizers and the congress proceedings in *Arachnologische Mitteilungen* (*Arachnologische Mitteilungen/Arachnology Letters*).

We take this opportunity to remind all members about the current ESA membership policy, which is as follows: 1) payment deadline by 1<sup>st</sup> of February; 2) in addition to the already established methods of pre-payment during congresses, members may send the money in registered mail or use PayPal; 3) waived fees under specific council criteria; 4) cancellation of membership after three consecutive years of no payment; 5) cross-checking membership in congress registration.

The Treasurer (Christian Kropf) reminded the meeting that the Society's account is held in Switzerland where there are more favourable account conditions. There was a balance of 5,275.45 Swiss Francs at the beginning of 2016, membership payments for 2016 were 916.60 SFr, and donation to Spiders of Europe of 1,075.00 SFr. No European congress was organized in 2016, so the balance at the end of December was 5,117.05. Income of 2017 memberships was 515.35 SFr, support to Nottingham Congress 2,200 SFr and 1,100 to 'Araneae Spiders of Europe', lead to a balance of 2,383 SFr remaining as of the end of August 2017. The treasurer's report was accepted by Jakob Walter on behalf of the auditors.

The president shared with the assembly that the council had approached several members regarding the venue of future congresses, and that the congress organizer and venue for next year would be announced soon after the meeting (see announcements in this newsletter).

The president announced one new honorary members (bringing the total to 15): Robert Bosmans (Belgium): congratulations!



Rob Bosmans (in this picture wearing a Robin Hood hat in the Sherwood forest) was elected honorary member during the ESA assembly





The assembly meeting was then closed with a vote of thanks to Sara and her team for hosting such an excellent congress. Theo Blick confirmed during the closing ceremony that the congress proceedings will be published in AraMit. Further details of the General Assembly can be found on the Society website.

### See you soon in Hungary!

The next ESA meeting is organized by Ferenc Samu and collaborators. The venue is Apor Vilmos Catholic University, Vác, Hungary, and will take place from 8-13 July, 2018. Vác is a small town with a population of 30000. It has a baroque historic centre and it is also seat of an archbishopric. The Catholic University offers lecture rooms, accommodation (student level) and catering all in its main building right on the main square of the town with additional accommodation possibilities in town. Vác is located on the Danube, where the Danube Bend starts, further surrounded by mountains on both sides of the river. The area offers plenty of historic, cultural and natural attractions. Accessibility is also quite optimal, as Vác is only some 35 km North of Budapest, connected by frequent train service (also an international line from Czech Republic and Slovakia) and highway. Nearest airport is the Budapest Airport (Franz Liszt).

### Announcements

- **2018 The 31st European Congress of Arachnology** will be held in Vác, Hungary, (Organizer: Ferenc Samu).
- **2019 The 21st International Congress of Arachnology** will be held at Lincoln University in Canterbury, New Zealand from 10–15 February 2019. There will be keynote speakers on a variety of topics (soon to be decided) and additional symposia. Planning is still ongoing and additional information will be posted at <http://arachnology.org/21st-ica-2019.html> (Organizer: Cor Vink).
- **2020 The 32nd European Congress of Arachnology** will be held in Greifswald, Germany (Organizers: Gabriele Uhl and Peter Michalik).
- **2021 The 33rd European Congress of Arachnology** will be held in Saint Malo, France (Organizer: Julien Pétillon).



Congress photo, Nottingham August 24<sup>th</sup>, 2017. Photo courtesy Emma Vincent.

