

Here is a list of oral presentation abstracts that have been received and are provisionally accepted. Final acceptance requires registration to be completed by 8 January 2019. Talks are currently in no particular order. We have received many abstracts for oral presentations and it is a challenge to schedule them all.

Student talks are marked with an asterisk. If your talk has not been labelled as a student talk and should be, please contact us at ICA2019NZ@gmail.com with “student talk” as the subject.

*Steinhoff et al. - Complex integration of visual information: The secondary eye pathway of the jumping spider brain

*Aguilar-Argüello et al. - Route assessment in jumping spiders

*Kessler et al. - Prey capture in *Habronattus formosus* (Salticidae): Roles of visual and vibratory senses, and of posterior lateral eyes

*Zeng et al. - Function of colour pattern in intra-specific interactions: a case study with jumping spiders

*Lietzenmayer et al. - It helps to be red: A comparative study of male coloration, sexual size dimorphism, and male size in salticids

Balasubramanian et al. - Role of visual cues and aggression in jumping spider responses to ant and ant mimics

*Wong & Li - Static allometry and evolutionary allometry of enlarged chelicerae in the myrmarachnines

*Kelly et al. - The evolution of ant mimicry in spiders

*McLean & Herberstein - Mimicry in Motion: can good behaviour compensate for poor morphological mimicry?

*Chamberland et al. - From Gondwana to GAARlandia: Evolutionary history and biogeography of ogre-faced spiders (*Deinopsis*)

*Armiach Steinpress et al. - *Lycosa* – species delimitation in the midst of diversity

*Holmquist & Gillespie - Ancient processes versus environmental change in shaping diversity of spider communities across Gunung Galang and Gunung Torompupu, Sulawesi

Čandek et al. - Caribbean *Cyrtognatha*, *Tetragnatha* and *Trichonephila*: Biogeographic patterns of spiders with different dispersal abilities

*Bopearachchi et al. - Integrative analysis of DNA phylogeography and morphology of the tribe Ballini in Sri Lanka (Araneae:Salticidae)

Fet et al. - Fauna and zoogeography of scorpions in Greece

Miller et al. - A multi-taxon cyberdiversity inventory of a small Caribbean island

Pétillon et al. - Relative efficiency of pitfall trapping vs. hand-collecting to sample ground-dwelling spiders along a structural gradient of neotropical habitats

*Raboin & Elias - Implications of winter climate change for overwintering mason spiders (*Castianeira*)

*Classen-Rodriguez & Fowler-Finn - Predation rates on North American *Leiobunum* harvestmen (Sclerosomatidae: Opiliones).

*Sheridan et al. - Whole-collection COI barcoding of New Zealand neopilionids (Opiliones: Neopilionidae)

Derkarabetian et al. - Phylogenomics of the Gondwanan Triaenonychidae (Opiliones, Laniatores), with discussion on UCE sequence capture from old museum specimens.

Sharma et al. - Phylogenomic disruption of basal Grassatores relationships: A Levantine relict precipitates further deconstruction of Phalangodidae (Arachnida: Opiliones: Laniatores)

Giribet et al. - The Opiliones of New Zealand: A revisionary synthesis for testing biogeographic hypotheses

Willemart - Our past and current knowledge on the sensory biology of harvestmen (Opiliones)

Zakharov & Ovtcharenko - Comparative morphology of ground spiders trichobothria (Araneae, Gnaphosidae)

Bastawade - Scorpion peg sensilla

*Goodman & Esposito - Systematics and niche partitioning of a unique clade of tree-dwelling scorpion (Buthidae: Centruroides)

Harvey & Huey - A molecular phylogeny of the fealloid pseudoscorpions (Feallidae and Pseudogarypidae) reveals ancient Pangean diversification

Cushing et al. - sCamel spider (Solifugae: Eremobatidae) research past and future

Silva de Miranda - Advances on Amblypygi research: past, present and future directions

Pekár & García - Coevolution of stridulation and hard cuticle resulted in the defensive acoustic mimicry

Rao et al. - Colour as deterrence: An empirical test of the anti-predator function of wing interference colours

*Corey & Hebets - Testing the hypothesized antipredator defense function of stridulation in the spiny orb-weaver, *Micrathena gracilis*

Rypstra et al. - Interspecific contests cannot explain species replacement in cellar spiders (Pholcidae).

McGinley et al. - Daily activity patterns match the most effective light environments for courtship in *Schizocosa* wolf spiders

Chen et al. - Female-biased risk avoidance and stress tolerance: benefits to reproduction

*Walls & Uetz - Behavioral syndromes and their effects on mating success in the brush-legged wolf spider, *Schizocosa ocreata*

Golobinek et al. - The role of personality variation in the mating context

*Aceves-Aparicio et al. - The Australian ant-slayer: specialized ant hunting behavior and the use of silk in *Euryopsis umbilicata* (Theridiidae)

Buzatto et al. - Selection for male weapons boosts female fecundity in bulb mites

Baggett & Brown - Desiccation tolerance and humidity preferences of two species of riparian-zone wolf spiders from Arizona, USA

Foellmer & Tariq - The effect of metabolic rate on performance in the salt marsh wolf spider *Pardosa littoralis*

Austin - Evolutionary patterns among hymenopteran predators and parasitoids of spiders

*Kallal et al. - The shape of weaver: using geometric morphometrics to explore shape disparity in Araneidae (Arachnida: Araneae)

*Frutiger & Kropf - Testing for an anti-adhesive surface coating in *Uloborus plumipes* and the web-invader *Pholcus phalangoides* (Araneae: Uloboridae, Pholcidae)

Méndez-Castro et al. - Foraging and mobility of spiders as behavioral filters for isolation and size of canopy islands

Sentenská et al. - Immature mating and male mate choice in the cannibalistic brown widow spider *Latrodectus geometricus*

Schneider - *Wolbachia* infections in *Nephila senegalensis*

Nakata - Female genital mutilation and the rejection of second males in *Cyclosa ginnaga*

*Fischer et al. - Identification of the sex pheromone of the female false black widow spider, *Steatoda grossa* (Theridiidae, Araneae)

Danielson-Francois & Drobot - Functional failures: flubbed intromissions act as cryptic sperm removal behaviors

*Rivera-Quiroz & Miller - Asymmetric genitalia in spiders, an overview of this rare phenomenon with emphasis on *Teutamus politus* Thorell 1890 (Araneae; Liocranidae)

Kuntner et al. - Golden orbweavers ignore biological rules: Phylogenomic and comparative analyses unravel a complex evolution of sexual size dimorphism

Harmer et al. - Biomechanics of sexually selected weapons in New Zealand harvestman

*Dudová & Klečka - Individual and sex-specific differences in behaviour of the nursery web spider (*Pisaura mirabilis*)

Dong et al. - Long-term benefits of extended maternal care in a jumping spider

Santana-Propper et al. - Resurrected ancestral activity of sicariid toxins informs evolution of specificity and consequences for prey immobilization

Gregorič et al. - Spider webs as a source of environmental DNA

*Deall & Goodacre - Spider silk: What's in those genes?

Arakawa et al. - Sequencing 1,000 spiders to elucidate the design mechanisms of spider silk proteins

Kelly et al. - Mechanical properties of spider silk enriched with carbon nanomaterials

Stellwagen & Renberg - Towards spider glue: Long-read scaffolding for extreme length and repetitious silk family genes AgSp1 and AgSp2 with insights into functional adaptation

*Thornber et al. - From liquid dope to solid fibres: studying factors influencing assembly within native spider silk glands

Babb et al. - The draft genome of Darwin's bark spider (*Caerostris darwini*) reveals an expanded capture spiral genetic toolkit

García et al. - Why are spiders so fast? A small biochemical history

Hormiga et al. - Phylogenomics resolves the phylogenetic relationships of the main lineages of spiders (Araneae)

Joel et al. - The adhesion of cribellate capture threads

*Piorkowski et al. - Mechanical integration of wet axial fibers enhances adhesion in cribellate silk of *Hickmania troglodytes*

Walter - No major progress in web decoration research – Why is that?

*Weißbach et al. - Influence of the spinneret's morphology onto the complex fibre processing in cribellate spiders

Gordus et al. - Defining orb-weaving behavior at a high spatiotemporal resolution

Chen et al. - There's more than one way to build a leaf retreat: Convergent solutions in orband pseudo-orb web spiders

*Kulkarni et al. - Big data, small spiders: analyses of ultraconserved elements give new perspectives on spider phylogeny and evolution of miniature orb-weavers

Coddington et al. - Spiders did not repeatedly gain, but repeatedly lost, foraging webs

*Foley et al. - Tarantula phylogenomics: A first phylogeny of major theraphosid spider lineages inferred from transcriptome data sheds light on the evolution of urticating setae

*Turk et al. - Macroevolutionary rate estimations in a nephilid phylogeny

*Hazzi et al. - Phylogeny and biogeography of the spider genus *Spinoctenus* (Araneae, Ctenidae) with comments on the systematics of Ctenidae

*Lo & Lin - molecular phylogeny of oxyopids

*Booyesen et al. - Revision, molecular phylogeny and biology of the spider genus *Micaria* Westring, 1851 (Araneae: Gnaphosidae) in the Afrotropical Region

*Silva-Moreira & Hormiga - A total evidence phylogenetic analysis of sheet web spiders (Araneae, Linyphiidae) with comments on the effects of missing data.

*Ágota Réka et al. - Semi-natural grasslands and rapeseed plantations field size effect on spider assemblage composition

*Daniel et al. - Spiders in agroecosystems: community structure and potential for biological pest control in Nebraska maize

*Bellvert et al. - Does trophic specialisation prevent ecological release?

*Yu et al. - Remote sensing derived habitat indices can predict spider species richness in urbanization gradient

*Badenhorst et al. - Diversity of springtails and spiders in three biomes in central South Africa

*Domènech et al. - For all audiences: the impact of incorporating immature stages on biodiversity assessment of mega-diverse groups

Michalko et al. - Biocontrol efficiency of spiders across the globe: a meta-analysis

Mukhtar et al. - Effect of thiamethoxam and trichlorfon on web building behavior of *Neoscona theisi* (Araneae; Araneidae)

Muster - Seven years of spider community succession in a Sphagnum farm

Haddad et al. - Spider assemblages in South African grasslands and the factors that shape them: a review of two decades of recent work

Foord et al. - The future of spider diversity on a mountain: habitat complexity and not elevation could explain their response to climate change

Nwankwo & Ewuim - First inventory of Nigeria spiders

Tanikawa et al. - Highly diversified population structure of *Lycosa ishikariana* inhabiting sandy beach habitat

Uhl et al. - Latitudinal differences in life history traits of a rapidly range-expanding spider

Das & Choudhury - First record of the dwarf spider genus *Alioranus* Simon, 1926 from India with the description of a new species (Araneae, Linyphiidae, Erigoninae)

Decae - Comparative nest construction in orthognate spiders

Dimitrov et al. - Understating pholcid relationships and diversification: recent advances and future directions

Benjamin - Advances in the understanding of the phylogeny of crab spiders (Araneae: Dionycha, Thomisidae)

Audisio & Bourguignon - Goblins underground: Termitophilous oonopids of the Afrotropical Region

Rheims - Neotropical Sparassidae: Who are they? Where are they? Where do they fit in?

Siliwa et al. - Taxonomic validation of the genus *Nemesiellus* Pocock, 1900 (Araneae: Idiopidae) with a description of a new species from Odisha, India

Patrick & Draney - A new species of spider from Mexico in the genus *Frontinella* F. O. Pickard-Cambridge (Araneae: Linyphiidae)

Horner et al. - A new myrmecophilic spider from the Chihuahuan Desert of West Texas

Ovtcharenko & Zakharov - Ground spiders of family Gnaphosidae on Zealandia: current distribution and relationship with adjunct lands

Jumping spiders: behaviour, ecology and evolution

Salticidae - Jackson (30 min)

Nelson et al. - Spare a thought for boredom

Chang et al. - Genetic basis for jumping spider aggression

Taylor et al. - Blood-related prey-odor primes females to attend to red in both foraging and mate choice contexts in a mosquito-specialist jumping spider

Cross & Jackson - A spider-eating predator's capacity to decide when to take a detour

Jakob et al. - Gaze direction in jumping spiders

Maddison - A phylogenetic perspective on salticid spider behaviour

Island Arachnids biogeography

Gillespie - Evolution of spiders on oceanic islands: The venture of few and gain of many

Esposito & Crews - It's complicated: Patterns of Caribbean biogeography in arthropods

Framenau et al. - Island biogeography: to be (indigenous), or not to be, that is the question

Malumbres-Olarte et al. - Multi-scale effects of habitat heterogeneity on spider communities of oceanic islands

Arnedo et al. - Go West! Colonisation and diversification of Dysdera ground dweller spiders in the Macaronesian Archipelagoes

*Privet et al. - Phylogeny of wolf spiders from the island of Hawai'i inferred from multilocus genetic data

Tanikawa et al. - Highly diversified population structure of *Lycosa ishikariana* inhabiting sandy beach habitat

*Baker & Giribet - Systematics and biogeography of Triaenonychidae (Opiliones: Laniatores) across Zealandia

Outstanding Opiliones: Reproductive and population-level biology in harvestmen

Kahn et al. - Nuptial gift chemistry reveals convergent evolution correlated with antagonism in mating systems of leiobunine harvestmen

Burns & Tsurusaki - Maintenance of sex via geographic heterogeneity and facultative parthenogenesis in a Japanese harvestman

Tsurusaki - Size matters: Possible cases of character displacement in Japanese harvestmen for preventing reproductive interference

Machado & Palaoro - Behavioral and morphological precursors predict the evolution of exclusive parental care in harvestmen

*Powell et al. - The physiology of alternative reproductive tactics in New Zealand harvestmen

Arachnological outreach for community engagement, conservation and research

Albo et al. - Kids that tell science: fearless and positive children after hands-on educational experience

Cushing - Arachnology at the Denver Museum of Nature & Science: Foundations of biodiversity studies using volunteers and paraprofessionals

Hebets et al. - Eight-Legged Encounters: Arachnids, volunteers, and art help to bridge the gap between informal and formal science learning

Kasumovic - The easy way to make any student into a scientist: The power of mobile devices

*Scott et al. - Twitter as a tool for arachnological outreach: reflections on a year of @RecluseOrNot

Arachnid venoms

Brewer - Venom evolution and its role in local adaptation, phenotypic plasticity, and diversification in Tetragnatha spiders

Cordes & Binford - Deep evolutionary history of spider venom phospholipase D toxins

Santibáñez-López & Sharma - Using phylogenomics and 3D protein modeling to study the evolution of scorpion venom

Kuhn-Nentwig et al. - The dual prey-inactivation strategy of the spider *Cupiennius salei*: dozens of possibilities to subdue a victim, more than just neurotoxins

*Langenegger - Spider venom enzymes and the function of a specific protease from the venom of the spider *Cupiennius salei*

The breadth of sexual strategies and reproductive morphology in arachnids – This is just the beginning!

Kasumovic - Is it worth it? Let me work it: The role of physiology in sexual selection

*Scott et al. - Spider silk and sex: from mating threads to veils and gift-wrap

*Segura-Hernández et al. - Ticklish females: a sensory structure specialized to sense male stimuli fails to support sexually antagonistic coevolution models in *Leucauge mariana* (Araneae, Tetragnathidae)

Wignall et al. - Constraints on courtship signalling in web-buidling spiders

Aisenberg - Exceptions that test rules: avant-garde females and demanding males in two sand-dwelling spiders from challenging environments

*Bollatti et al. - Take a chance on me: second mating opportunities in a South American wolf spider

Michalik et al. - The innervation of the male copulatory organ of spiders (Araneae) – a comparative analysis

Growth, morphogenesis and developmental genetics

*Akiyama-Oda et al. - *Parasteatoda tepidariorum* is a model spider that permits genome-based study of developmental biology

Jędrzejowska & Halajian - Chelicerate type ovaries in spiders, solifuges, pseudoscorpions and scorpions – similar but not identical

Growth - Santibañez López et al.

*Setton & Sharma - The genetic architecture of spider spinnerets: a new spin on an old question

Ontano et al. - Testing the placement of Pseudoscorpions through rare genomic changes

Gainett & Sharma - How do whip spiders make their whips? Applying differential gene expression approaches to identifying genetic mechanisms

Mygalomorph spiders – evolution and conservation

Enguítanos et al. - Good fences make good neighbours: Resolving evolutionary history and species delimitation of western Mediterranean ctenizid trap-door spiders

Montes de Oca et al. - phylogenomics of Neotropical Nemesiidae

Huey et al. - Spiders in the desert: the role of climate refugia in maintaining lineage diversity of mygalomorph spiders in the Australia arid zone

*Wilson et al. - Enigmatic architects of eastern Australia: integrating morphology, molecules and burrow architecture to resolve the systematics of the golden trapdoor spiders (Idiopidae: Arbanitinae: Euoplini)

Rix et al. - Conservation systematics of Australia's spiny trapdoor spiders (Idiopidae): revealing a continental fauna before it's too late

Pérez-Miles et al. - Back to the future: between Barychelidae and Theraphosidae the ex-Paratropidid *Melloina* Brignoli 1985 (Araneae, Mygalomorphae)

*Briggs et al. - A molecular perspective of the biodiversity of Australian tarantulas (Theraphosidae)

*Mason et al. - The longest-lived spider: mygalomorphs dig deep, and persevere

Young arachnologists talks

Hamilton - Arthropod systematics in the age of “big data” and machine learning

Harms - Pseudoscorpion research in the 21st century – discovering the great unknown

Krehenwinkel - The promises of next generation sequencing technology for high throughput assessment of spider diversity

Painting et al. - The evolution of diverse animal weapons

Wolff et al. - Physical optimum in silk anchors as a global driver of spider web evolution

Wood - Evolution of palpimanoid spiders: bizarre morphologies, unusual behaviors, and extreme speeds