

COME TO A LECTURE BY OUR

LEADING ARACHNOLOGIST STANO PEKÁR

*The secret life of
prey-specialized spiders*

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Lecture Hall IBP of the CAS
(Brno, Kralovopolska 135)**



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Predators appear to be less frequently specialised on their prey than herbivores, parasites or parasitoids. I will present a unifying concept of four types of trophic categories in predators using ecological and evolutionary contexts. I will overview levels of prey specialization found in spiders and then I will focus on trophic adaptations of prey-specialized spiders. I will review the available evidence for psychological, behavioural, morphological, venomous, and metabolic adaptations. Psychological adaptations include specific attention to signals produced by ant-eating spiders. Morphological adaptations are apparent on modified chelicera of woodlice-eating spiders. Behavioural adaptations were known in moth-eating bolas spiders. Metabolic adaptations are known from spider-eating spiders. And venomous adaptations are apparent in ant- and termite-eating spiders. Tracking of prey-specialisation on family-level phylogenies revealed that spider-eating is ancestral and while other specialisations as derived. Finally, I will propose avenues for future research.