



University of Nova Gorica, Graduate School

doc. dr. Urška Lavrenčič Štangar
Vipavska 13, p.p. 301, SI-5001 Nova Gorica, tel.:05 3315 241, fax:05 3315 296, e-mail: urska.lavrencic@p-ng.si

INVITATION TO THE LECTURE

entitled

Evolutionary arms race? Phylogenetics and sexual biology of nephilid spiders

dr. Matjaž Kuntner

Institute of Biology, Scientific Research Centre of the Slovenian Academy of Sciences and Arts, Ljubljana

Thursday, January 18th 2007 at 16:00

*Lecture hall 201 of the School of Environmental Sciences,
Via Croce 3, Gorizia, Italy*

Spiders are ideal for studying genital divergence because that is often the only salient trait that differs among closely related species; all others (life-history, reproduction) are held constant. Among spiders, the clade Nephilidae, now taxonomically revised, is becoming a model lineage for sexual evolution tests. Here, the author will present the currently understood sexual character evolution in nephilid spiders based on phylogenetic analyses of morphological and ethological data. Recently a new theory of sexual conflict promoting antagonistic co-evolution has been proposed to be a strong engine in creating variation in reproductive traits, mostly in insects. While the recent literature does not support such “arms race” models in spiders, his results suggest otherwise. Male and female genital and ethological features appear to co-evolve antagonistically. Spider genitalic evolution contrasts with better known animal models, and may strongly challenge existing views of sexual selection and related evolutionary processes.

Kindly invited!