

# Workshop: Comparative methods in evolutionary biology

Stazione Zoologica Anton Dohrn, December 5<sup>th</sup>-7<sup>th</sup>, 2016

### Day 1

- ✓ Introduction to the use of phylogeny in comparative methods
- ✓ Likelihood and bayesian inference methods
- Theory on molecular clocks
- ✓ Tutorials on relaxed clocks using Beast 1.8
- ✓ Introduction to R

#### Day 2

- ✓ Tutorial on total-evidence dating using Beast 2.3
- Introduction to the use of remote servers (Cipres) for phylogenetic analyses
- Tutorial on comparative methods for exploring the evolution of discrete and continuous characters

#### Day 2

- ✓ Theory and approaches to the study of adaptive radiations
- Tutorials on comparative methods for detecting and quantifying heterogeneity in evolutionary rates (BAMM)

Registration fees: 100€ (fees include lunches); special price at 50€ for students enrolled at the Universities of Naples (Federico II and Partenopea) with no lunch included

<u>Participants</u>: this workshop is preferentially addressed to PhD students, postdocs and researchers with basic knowledge of phylogeny (sequence alignments, nucleotide substitution models and basic tree building). Max number 25

#### **Tutors:**

Francesco Santini Associazione Italiana per lo Studio della Biodiversitá (Italy)

Bruno Frédérich University of Liège (Belgium)

#### **Organisers:**

Sergio Stefanni Salvatore D'Aniello Giuseppe Orfano Andrea Tarallo

# Registration deadline is November 15th at:

## sergio.stefanni@szn.it

Please include a few lines on your background, level of confidence with R and Beast/Beauty, expectations from this workshop.

People will be admitted to the course following application review by the admissions committee.