

## Timing

Wed 15 February at 13:15-14:15 ViPS Invited Plant Seminar

Viikki B building, lecture room 4 (Latokartanonkaari 7-9)

Pablo Goloboff, National Scientific and Technical Research Council, Argentina: On model-based phylogenetic inference for analysis of morphological data

Thu 16 February at 9:15-16:00

D building, room D186 (Latokartanonkaari 11)

Whole day sessions with several lectures

Fri 17 February at 9:15-16:00

Forest sciences building, lecture room 104 (Latokartanonkaari 7)

Whole day sessions with several lectures

## Contents

LEARN FROM THE VERY BEST! All you ever wanted to know about phylogenetics (but didn't dare to ask).

Lectures and computer demonstrations by Pablo Goloboff and Claudia Szumik (Unidad Ejecutora Lillo, Fundación Miguel Lillo, CONICET, San Miguel de Tucumán, Argentina) & Ward Wheeler (Richard Gilder Graduate School, American Museum of Natural History, NY, USA).

The topics covered will include e.g.:

analysis of morphological (and other) data

measures of group support

comparisons between trees, consensus & supertrees

parsimony analyses of large and difficult datasets

areas of endemism in a systematic framework

spatial analyses of vicariance

flavors of maximum likelihood analyses & how they relate to "Bayesian" analyses

DO (dynamic optimization)

Monte Carlo methods

paralogy in genomic era

The course will be informal, focusing mostly on the use of computational tools. Some topics in the list can be emphasized and developed in more detail, depending on the interests of the audience as the course develops.

## Conduct

In order to credits for the course you have to write a SHORT summary (ca. half page) of each lecture and send it as e-mail attachment by Feb. 28th to Jaakko Hyvönen (jaakko.hyvonen(at)helsinki.fi).

## Relation to other study units

Basic knowledge on cladistics (526084) and molecular systematics (59923) will help you to follow the lectures. It is highly recommended to familiarize with the topics by checking out publications by the lecturers. Many of them have been published in the journal of the Willi Hennig Society, Cladistics, that is available in electronic format also in our University library.