

Application

The summer school aims at young scientists with a background in biology or environmental natural sciences who recently started to work on the analysis of genetic data with a focus on phylogeny and/or microbial taxonomy. Researchers at PhD student level are welcome to apply, but also young post docs and advanced master students. The deadline for application is 1st of July, 2014.

Send your application by email (single pdf file) to:
franziska.klotz@uni-oldenburg.de

It has to include a short CV, a letter of motivation describing the scientific background of the applicant and his/her personal expectation from attendance of the summer school. Good English knowledge must be appropriately documented in the application. The successful candidates are required to present a poster during the summer school.

Please visit our website for further information:

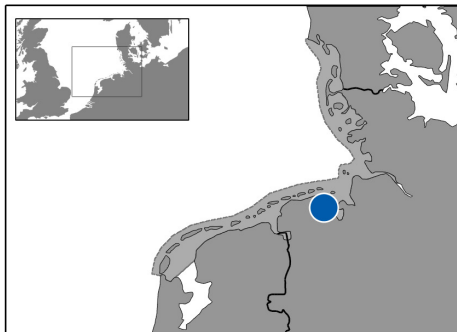
<http://www.icbm.de/cma2014>

Computational Molecular Analysis Summer School 2014 29.09. - 03.10.2014

Institute for Chemistry and Biology
of the Marine Environment (ICBM)
University of Oldenburg
Carl von Ossietzky Str. 9-11
D-26129 Oldenburg.
www.icbm.de

Location in Wilhelmshaven:
ICBM-Terramare
Schleußenstr. 1
D-26382 Wilhelmshaven

Contact:
CMA Summer School - Georg Steinert
Phone +49 (0)4421 - 944 218
<http://icbm.de/umweltbiochemie>



Dieses Projekt wird mit Mitteln des Europäischen Fonds für regionale Entwicklung gefördert.



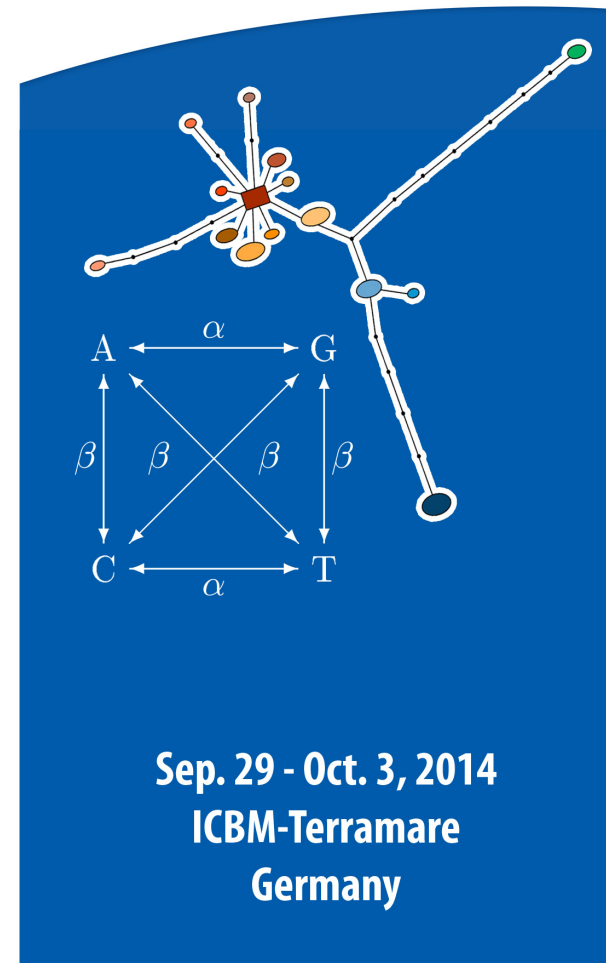
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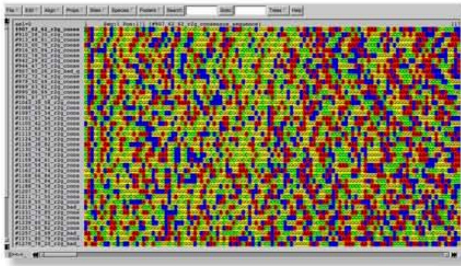


Computational Molecular Analysis Summer School 2014



Scope

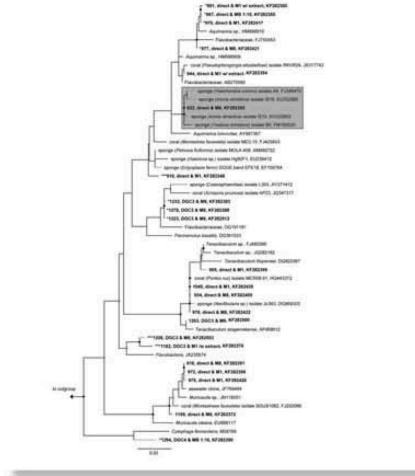
Initially the principal role of phylogeny was the description of relationships among species in systematics and taxonomy. With the invention of DNA sequencing technologies phylogenetic analysis methods started to expand into almost every branch of biology. The establishment of parallel, high-throughput sequencing technologies changed the way of generating sequence data in many genetic projects. The development of computational analysis methods for molecular data is rapidly growing and researchers are in need to keep pace with the newest progress in bioinformatics tools.



To young scientists who just started working in the field of computational molecular analysis, the existence of many analytical methods and software packages appear overwhelming. The aim of this workshop is to address current methodologies of computational analysis using sequence data. One emphasis will be a review of current phylogenetic inference methods and the selection of statistical methods that are best suited to particular questions and data types. Another focus will be a glimpse into next-generation sequencing techniques, the inevitable huge datasets they create, and the subsequent analysis of such data.

Main Topics

- Alignments
- Phylogeny
- Barcoding
- 16S rRNA phylogeny
- ARB/SILVA
- SilvaNGS
- High-throughput sequencing community analysis

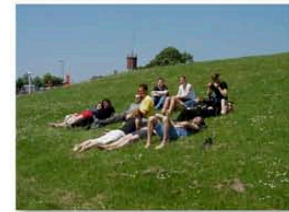


Organisation, Fees and Travel

The number of participants will be limited to 14. Each day will be structured into two lectures and two practical sessions. Each participant will work either on his own computer (Linux operating system), or will be supplied with one of our course laptops. There will be a poster session to present recent, present, or future scientific work of the students.

The language of the course will be English.

Thanks to funding by the ICBM Graduate School OLTECH, the fee for summer school is 150 Euro. Accommodation, lunch and course materials are included. Students who organize their own accommodation will receive a discount on the summer school fee. Participants are expected to arrive between Saturday, Sep. 27 and Sunday, Sep. 28, 2014 at the ICBM-Terramare Wilhelmshaven, and accommodation is provided until Saturday Oct. 4



Accommodation

During the week accommodation will be in the ICBM guest house in Wilhelmshaven. It provides shared bedrooms and a fully equipped kitchen for self-preparing of breakfast and dinner. The course room will be in the main ICBM-Terramare building. Students from Oldenburg can also use the accommodation if not fully occupied.

