

High Performance Bioinformatics

Cineca Roma - Sala Corsi, 13-15 December 2017

Docenti

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AGENDA

13 december

- 09:15 Registration
- 09:30 - 13:00 Introduction to Cineca Supercomputing Environment
- 13:00 - 14:00 Lunch
- 14:00 - 17:00 Hands-on session on bioinformatics data analysis through Linux and scripting comma

14 december

- 09:30 - 13:00 Introduction to bioinformatics modules and examples of workflow implementation
- 13:00 - 14:00 Lunch
- 14:00 - 15:30 Hands-on session on automation of an RNA-seq pipeline
- 15:30 - 17:00 Introduction to GPU and an example of GPU-based alignment tool

15 december

- 09:30 - 10:30 Introduction to parallel computing through MPI
- 10:30 - 13:00 MPI4py: speeding up bioinformatics analysis with MPI & Python
- 13:00 - 14:00 Lunch
- 14:00 - 17:00 Hands-on session on parallel computing with MPI: design and development of a paral MPI-based aligner on big datasets