

GPU applications in bioinformatics

09:15 - 09:30	Welcome <i>Luciano Milanese (1), Giuliano Armano (2)</i> 1. National Research Council - Institute of Biomedical Technology (CNR-ITB), Milan, Italy 2. University of Cagliari - Dept. of Electrical and Electronic Engineering (UniCa-DIEE), Cagliari, Italy
09:30 - 09:45	Overview of the GPU Technologies <i>Andrea Marconi (1, 2), Marco Moscatelli (1), Matteo Gnocchi (1)</i> 1. National Research Council - Institute of Biomedical Technology (CNR-ITB), Milan, Italy 2. University of Cagliari - Dept. of Electrical and Electronic Engineering (UniCa-DIEE), Cagliari, Italy
09:45 - 10:15	Graph traversal and analysis on GPU <i>Vincenzo Bonnici (1), Federico Busato (1), Nicola Bombieri (1), Rosalba Giugno (1)</i> 1. University of Verona - Dept. Computer Science, Verona, Italy
10:15 - 10:45	Bioinformatics applications based on GPU <i>Andrea Manconi (1,2), Giuliano Armano (2), Matteo Gnocchi (1), Emanuele Manca (1), Marco Moscatelli (1), Luciano Milanese (1)</i> 1. National Research Council - Institute of Biomedical Technology (CNR-ITB), Milan, Italy 2. University of Cagliari - Dept. of Electrical and Electronic Engineering (UniCa-DIEE), Cagliari, Italy
10:45- 11:15	Break
11:15 - 11:45	GPU-Accelerated Molecular Dynamics Simulation: the case study of HIV-1 matrix protein p17 variants in lymphoma pathogenesis <i>Alessandro Orro (1), Pasqualina D'Ursi (1)</i> 1. National Research Council - Institute of Biomedical Technology (CNR-ITB), Milan, Italy
11:45- 12:15	Performances of bioinformatics pipelines deployed on energy efficient architectures <i>Gastone Castellani (1), Cristina Duma (2), Andrea Ferraro (2), Barbara Martelli (2), Elisabetta Ronchieri (2), Cristina Vistoli (2), Enrico Giampieri (1), Italo Faria do Valle (1), Nico Curti (1), Daniel Remondini (1)</i> 1. University of Bologna - Dept. of Physics, 2. INFN-CNAF