

INTRODUCTION TO PERFORMANCE AND ENERGY EFFICIENCY ANALYSIS

April 5, 2022 ONLINE

The course will offer an introduction to the fundamental concepts of performance, power consumption, and energy efficiency in HPC systems. Then it will focus on the performance analysis process and methodology developed during the POP project, followed by the mechanisms that today's computing elements and systems provide in terms of monitoring and control of power and energy dissipation. Finally, it will introduce and give hands-on sessions for a set of tools for performance analysis as well as reducing the energy consumption in HPC devices.

Timetable:

9:00-9:15 Course Introduction

9:15-10:45 Introduction to Performance Tools and POP methodology

10:45-11:00 Coffee break

11:00–12:30 Hands-on: Performance Analysis using POP methodology

12:30-13:30 Lunch break

13:30–15:00 Energy Efficiency Features of the modern HPC hardware and energy consumption measurement

15:00-15:15 Coffee break

15:15–16:45 Hands-on: Energy-efficient HPC application execution using MERIC

16:45-17:00 Q&A, Closing

Level: intermediate

Language: English







