

# **[ONLINE] PATC: Introduction to high-fidelity combustion simulations using HPC @ BSC**

**Thursday, November 3, 2022 - Thursday, November 3, 2022**

## **Scientific Program**

9:00-10:00 Part 1: Fundamentals of combustion: laminar flames (Benedicte Cuenot, CERFACS)  
10:00-11:00 Part 2: Fundamentals of combustion: laminar flames (Benedicte Cuenot, CERFACS)  
11:00-11:15 Break  
11:15-12:15 Turbulent combustion (Laurent Gicquel, CERFACS)  
12:15-13:15 HPC Methodologies for combustion (Eduardo Perez, BSC)  
13:15-14:00 Lunch  
14:00-15:00 Exascale-enabling technologies for Combustion: CoEC project: scope & objectives  
(Leonardo Pachano, BSC)  
15:00-16:00 Part 1: ML-based methodologies for combustion (Temistocle Grenga, RWTH)  
16:00-16:15 Break  
16:15-17:15 Part 2: ML-based methodologies for combustion (Temistocle Grenga, RWTH)  
17:15-18:15 Interactive supercomputing for in-situ analysis (Jens Gobbert, JSC)