

# **Scientific Applications towards Exascale**

## **Report of Contributions**

Contribution ID: **0**

Type: **not specified**

## **EoCoE project**

*Wednesday, October 4, 2017 9:20 AM (10 minutes)*

**Presenter:** AUDIT, Edouard (MdlS)

Contribution ID: 1

Type: **not specified**

## **PRACE PCP machine @CINES**

*Wednesday, October 4, 2017 9:30 AM (20 minutes)*

**Primary author:** ROUCHON, Olivier (CINES)

**Presenter:** ROUCHON, Olivier (CINES)

Contribution ID: 2

Type: **not specified**

## **KNL architecture**

*Wednesday, October 4, 2017 9:50 AM (1 hour)*

**Primary author:** INTEL

**Presenter:** INTEL

Contribution ID: 3

Type: **not specified**

## **GENCI technological survey group**

*Wednesday, October 4, 2017 11:20 AM (20 minutes)*

**Primary author:** HAUTREUX, Gabriel (GENCI)

**Presenter:** HAUTREUX, Gabriel (GENCI)

Contribution ID: 4

Type: **not specified**

## **CINECA Marconi**

*Wednesday, October 4, 2017 11:40 AM (20 minutes)*

**Presenter:** CAVAZZONI, Carlo (CINECA)

Contribution ID: 5

Type: **not specified**

## **Optimizing Electronic-Structure Codes for KNL: Lights and Shadows**

*Wednesday, October 4, 2017 12:00 PM (30 minutes)*

**Presenter:** BONFA', Pietro (CINECA)

Contribution ID: 6

Type: **not specified**

## **Towards Green Aviation with Python at Petascale**

*Wednesday, October 4, 2017 2:00 PM (1 hour)*

**Presenter:** VINCENT, Peter (Imperial College London)



Contribution ID: 7

Type: **not specified**

## **qr\_mumps: a runtime-based Sequential Task Flow parallel solver**

*Wednesday, October 4, 2017 3:00 PM (30 minutes)*

**Presenter:** BUTTARI, Alfredo (IRIT)

Contribution ID: 8

Type: **not specified**

## HYDRO

*Wednesday, October 4, 2017 3:30 PM (30 minutes)*

**Presenter:** LAVALLÉE, Pierre-François (IDRIS)

Contribution ID: 9

Type: **not specified**

## **Efficient Monte Carlo Neutron Transport Calculations with Advanced Architectures**

*Wednesday, October 4, 2017 4:30 PM (30 minutes)*

**Presenter:** WANG, Yunsong (MdlS)

Contribution ID: **10**

Type: **not specified**

## **Metalwalls on Xeon, Xeon Phi and GPU**

*Wednesday, October 4, 2017 5:00 PM (30 minutes)*

**Presenter:** HAEFELE, Matthieu (MdlS)

Contribution ID: 11

Type: **not specified**

## **Porting of Alya, a high performance computational mechanics code, to accelerators: KNL and GPU**

*Wednesday, October 4, 2017 5:30 PM (30 minutes)*

**Presenter:** HOUZEAUX, Guillaume (BSC)

Contribution ID: 14

Type: **not specified**

## **DEEP-EST Project**

*Thursday, October 5, 2017 9:00 AM (30 minutes)*

**Presenter:** EICKER, Norbert (JSC)

Contribution ID: 15

Type: **not specified**

## **Fusion energy and the case for exa-scale computing**

*Thursday, October 5, 2017 9:30 AM (30 minutes)*

**Presenter:** LISGO, Steve (ITER)

Contribution ID: 16

Type: **not specified**

## **Scaling and optimizing Gysela code on a Intel KNL cluster**

*Thursday, October 5, 2017 10:00 AM (30 minutes)*

**Presenter:** LATU, Guillaume (CEA)



Contribution ID: 17

Type: **not specified**

## **PIC codes on the road to exascale: adaptation to MIC architectures**

*Thursday, October 5, 2017 11:00 AM (30 minutes)*

**Presenter:** LOBET, Mathieu (MdlS)

Contribution ID: **18**

Type: **not specified**

## **POP performance auditing of applications on new architectures**

*Thursday, October 5, 2017 11:30 AM (30 minutes)*

**Presenter:** WYLIE, Brian (JSC)

Contribution ID: **19**

Type: **not specified**

## **TRAINING - Lectures on PRACE PCP and KNL usage**

*Thursday, October 5, 2017 1:30 PM (1 hour)*

Contribution ID: 20

Type: **not specified**

## **TRAINING - KNL Hands-on 1**

*Thursday, October 5, 2017 2:30 PM (4 hours)*

Contribution ID: 21

Type: **not specified**

## **TRAINING - KNL Hands-on 2**

*Friday, October 6, 2017 9:00 AM (3 hours)*