

**RTC4AO4 : workshop on
real-time control for adaptive
optics (4th edition)**

Report of Contributions

Contribution ID: 13

Type: **not specified**

Lessons Learnt from SPARTA, an operational perspective

Tuesday, December 20, 2016 2:00 PM (30 minutes)

Presenter: Mr SUAREZ VALLES, Marcos (ESO)

Contribution ID: 14

Type: **not specified**

High Performance Linear Algebra

Monday, December 19, 2016 10:30 AM (30 minutes)

Presenter: Dr LTAIEF, Hatem (KAUST)

Contribution ID: 15

Type: **not specified**

Performance portability in High Performance Computing

Tuesday, December 20, 2016 10:00 AM (30 minutes)

Presenter: Mr KESTENER, Pierre (CEA / Maison de la Simulation)

Contribution ID: **16**

Type: **not specified**

What's new @Intel

Monday, December 19, 2016 2:00 PM (30 minutes)

Presenter: Mr THIERRY, Philippe (INTEL)

Contribution ID: 17

Type: **not specified**

What's new @IBM

Tuesday, December 20, 2016 4:35 PM (30 minutes)

Presenter: VANEL, Laurent (IBM)

Contribution ID: **18**

Type: **not specified**

What's new @ NVIDIA

Wednesday, December 21, 2016 10:00 AM (30 minutes)

Presenter: Mr COURTEILLE, François (NVIDIA)

Contribution ID: **19**

Type: **not specified**

FPGA solutions for AO RTC

Wednesday, December 21, 2016 11:40 AM (30 minutes)

Presenter: Dr BIASI, Roberto (Microgate)

Contribution ID: **20**

Type: **not specified**

COMPASS status update and new developments

Monday, December 19, 2016 11:05 AM (25 minutes)

Presenter: FERREIRA, Florian (LESIA, Observatoire de Paris)

Session Classification: Simulations

Contribution ID: 21

Type: **not specified**

Real-time Simulation for Adaptive Optics Real-time Control System Development

Monday, December 19, 2016 11:30 AM (25 minutes)

Presenter: REEVES, Andrew (University of Durham)

Session Classification: Simulations

Contribution ID: 22

Type: **not specified**

AO simulations for pyramid wavefront sensing on the e-elt

Monday, December 19, 2016 12:20 PM (25 minutes)

Presenter: DURAND, Sebastien (LESIA, Observatoire de Paris)

Session Classification: Simulations

Contribution ID: 23

Type: **not specified**

Simulations of using a Laser Guide Star to measure the wavefront in the context of optical communications.

Monday, December 19, 2016 11:55 AM (25 minutes)

Presenter: Mrs MARTÍNEZ, Noelia (Instituto de Astrofísica de Canarias (IAC))

Session Classification: Simulations

Contribution ID: 24

Type: **not specified**

The NFIRAOS Real-Time Controller

Monday, December 19, 2016 2:35 PM (25 minutes)

Presenter: Mr SMITH, Malcolm (NRC)

Session Classification: Current and future AO systems

Contribution ID: 25

Type: **not specified**

Scientific requirements and dimensioning for the MICADO MAORY-SCAO RTC

Monday, December 19, 2016 3:00 PM (25 minutes)

Presenter: Mr SEVIN, Arnaud (LESIA / Observatoire de Paris)

Session Classification: Current and future AO systems

Contribution ID: 28

Type: **not specified**

Parallelization of an LQG TT controller for the GeMS RTC

Tuesday, December 20, 2016 10:35 AM (25 minutes)

Presenter: Prof. KULCSAR, Caroline (Institut d'Optique Graduate School)

Session Classification: New Algorithms

Contribution ID: 29

Type: **not specified**

On-sky tests of CuReD and HWR (fast wavefront reconstructors) with CANARY

Tuesday, December 20, 2016 11:00 AM (25 minutes)

Presenter: BITENC, Urban (University of Durham)

Session Classification: New Algorithms

Contribution ID: 30

Type: **not specified**

Efficient supervision strategies for tomographic AO systems on the E-ELT

Tuesday, December 20, 2016 11:45 AM (25 minutes)

Presenter: DOUCET, Nicolas (LESIA, Observatoire de Paris)

Session Classification: New Algorithms

Contribution ID: 31

Type: **not specified**

Atmospheric characterisation with AO telemetry for RTC optimisation

Tuesday, December 20, 2016 12:10 PM (25 minutes)

Presenter: Dr OSBORN, James (University of Durham)

Session Classification: New Algorithms

Contribution ID: 32

Type: **not specified**

Status update on the Green Flash project

Monday, December 19, 2016 4:10 PM (25 minutes)

Presenter: GRATADOUR, Damien

Session Classification: Current and future AO systems

Contribution ID: 33

Type: **not specified**

The research program at Durham University on real-time control

Tuesday, December 20, 2016 2:35 PM (25 minutes)

Presenter: Dr DIPPER, Nigel (Durham University)

Session Classification: New Hardware Trends

Contribution ID: 34

Type: **not specified**

Performance of ELT-size AO RTC on GPUs within the framework of DARC

Tuesday, December 20, 2016 3:45 PM (25 minutes)

Presenter: BITENC, Urban (Research Associate)

Session Classification: New Hardware Trends

Contribution ID: 35

Type: **not specified**

ELT-scale real-time control on a Xeon Phi

Tuesday, December 20, 2016 4:10 PM (25 minutes)

Presenter: Mr JENKINS, David (Durham University)

Session Classification: New Hardware Trends

Contribution ID: 36

Type: **not specified**

A GPU based RTC for E-ELT Adaptive optics: RTC prototype

Wednesday, December 21, 2016 10:30 AM (25 minutes)

Presenter: BERNARD, Julien (LESIA, Observatoire de Paris)

Session Classification: New Hardware Trends

Contribution ID: 37

Type: **not specified**

A GPU based RTC for E-ELT Adaptive optics: addressing the latency / jitter constraints

Wednesday, December 21, 2016 10:55 AM (25 minutes)

Presenter: LAINÉ, Maxime (LESIA, Observatoire de Paris)

Session Classification: New Hardware Trends

Contribution ID: **38**

Type: **not specified**

AO RTC Middleware strategies for the E-ELT

Presenter: Mr YOUNGER, Edward (Durham University)

Contribution ID: 39

Type: **not specified**

Building a smart interconnect strategy

Tuesday, December 20, 2016 3:00 PM (25 minutes)

Presenter: GRATADOUR, Damien (LESIA, Observatoire de Paris)

Session Classification: New Hardware Trends

Contribution ID: 40

Type: **not specified**

Suitability of ALPAO deformable mirrors for open-loop control

Wednesday, December 21, 2016 2:00 PM (20 minutes)

Presenter: BITENC, Urban (Research Associate)

Session Classification: New components

Contribution ID: 41

Type: **not specified**

The RTC for METIS SCAO

Monday, December 19, 2016 3:45 PM (25 minutes)

Presenter: Dr BERTRAM, Thomas (Max-Planck-Institute for Astronomy, Heidelberg)

Session Classification: Current and future AO systems