Workshop on Advanced Computing for Accelerators

Report of Contributions

https://indico.cern.ch/e/218742

Contribution ID: **0** Type: **not specified**

Doing more in less time - Some examples of task farming and parallel computing in computational solid state chemistry.

Wednesday 16 January 2013 11:30 (30 minutes)

Presenter: Dr COOKE, David (Huddersfield University)

Contribution ID: **1** Type: **not specified**

The Puffin code for Free Electron Laser simulation

Wednesday 16 January 2013 12:00 (30 minutes)

Presenter: Dr CAMPBELL, Lawrence (Strathclyde)

Contribution ID: **2** Type: **not specified**

Introduction to HPC and parallel architectures: hardware

Wednesday 16 January 2013 10:10 (30 minutes)

Presenter: FOLLOWS, Jonathan (Hartree Centre)

Contribution ID: **3** Type: **not specified**

Experience with GPMAD

Wednesday 16 January 2013 12:30 (20 minutes)

Presenter: Dr TYGIER, Sam (Manchester)

Contribution ID: **4** Type: **not specified**

Parallelising Geant4

Wednesday 16 January 2013 16:15 (30 minutes)

Presenter: Dr ALLISON, John

Contribution ID: **5** Type: **not specified**

Multithreading in the MERLIN simulation program

Wednesday 16 January 2013 15:05 (20 minutes)

Presenter: MOLSON, James

Contribution ID: **6** Type: **not specified**

What are the physics research challenges?

Thursday 17 January 2013 09:40 (1h 30m)

Presenter: Dr PRIOR, Christopher (STFC)

Contribution ID: **7** Type: **not specified**

What are the new techniques and algorithms available?

Thursday 17 January 2013 11:30 (1h 30m)

Facilitated by Michael Gleaves

Presenter: GLEAVES, Michael

Contribution ID: **8** Type: **not specified**

Discussion on funding possibilities

Thursday 17 January 2013 14:40 (50 minutes)

Contribution ID: **9** Type: **not specified**

What next? Possible collaborations and proposals

Thursday 17 January 2013 16:00 (1h 30m)

Presenter: CHATTOPADHYAY, Swapan (Cockcroft Institute, UK)

Contribution ID: **10** Type: **not specified**

Further contributions to be added....

Contribution ID: **12** Type: **not specified**

Multipactor Simulations with VORPAL

Wednesday 16 January 2013 17:05 (30 minutes)

Presenter: Dr LINGWOOD, Chris

Contribution ID: **13** Type: **not specified**

Tutorials (I)

A chance to get to use parallelised versions of popular and useful programs, including (possibly)
1) ANSYS
2) VORPAL
3) CST
4) ASTRID+_ELEGANT+GENESIS

Contribution ID: **14** Type: **not specified**

Introduction to the Workshop - Day 1

Tuesday 15 January 2013 10:00 (15 minutes)

Presenter: BARLOW, Roger (University of Huddersfield (GB))

Contribution ID: **15** Type: **not specified**

Introduction to the Workshop - Day 2

Wednesday 16 January 2013 10:00 (10 minutes)

Presenter: BARLOW, Roger (University of Huddersfield (GB))

Contribution ID: **16** Type: **not specified**

Introduction to HPC and parallel architectures : software

Wednesday 16 January 2013 10:40 (30 minutes)

Presenter: ASHWORTH, Mike

Contribution ID: **17** Type: **not specified**

Introduction to the workshop - Day 3

Thursday 17 January 2013 09:30 (10 minutes)

Presenter: BARLOW, Roger (University of Huddersfield (GB))

Contribution ID: **18** Type: **not specified**

A parallel differential algebra code: tackling an apparently linear problem with openmp.

Wednesday 16 January 2013 16:45 (20 minutes)

Presenter: BRETT, David Robert (University of Manchester (GB))

Contribution ID: **19** Type: **not specified**

Experiences with a CONDOR pool

Wednesday 16 January 2013 15:25 (20 minutes)

Presenter: LINGWOOD, Chris (Lancaster)

Contribution ID: **20** Type: **not specified**

OPAL and FEMAXX - Parallel Codes for Particle Accelerator Modelling

Wednesday 16 January 2013 14:20 (45 minutes)

Presenter: ADELMANN, Andreas (PSI)

Contribution ID: **21** Type: **not specified**

Multi-objective genetic optimisation

Wednesday 16 January 2013 13:50 (30 minutes)

Presenter: VAN DER GEER, Bas (Pulsar Physics)

Contribution ID: **22** Type: **not specified**

Basic use of the system and job submission

Tuesday 15 January 2013 10:15 (15 minutes)

Presenter: ALLAN, Rob (STFC)

Contribution ID: **23** Type: **not specified**

Introduction to running ELEGANT on Sid

Tuesday 15 January 2013 10:30 (10 minutes)

Presenter: WILLIAMS, Peter

Contribution ID: **24** Type: **not specified**

Introduction to using GENESIS on Sid

Tuesday 15 January 2013 10:40 (10 minutes)

Presenter: DUNNING, David (STFC)

Contribution ID: **25** Type: **not specified**

Practical session for ELEGANT and GENESIS

Tuesday 15 January 2013 10:50 (2h 10m)

Contribution ID: **26** Type: **not specified**

Introduction to running VORPAL on SID

Tuesday 15 January 2013 14:00 (15 minutes)

Presenter: SMITH, Jonny (Tech-X)

Contribution ID: **27** Type: **not specified**

Parallel solution of large sparse linear equation systems

Wednesday 16 January 2013 15:55 (20 minutes)

Presenter: MEHMOOD, Rashid (Huddersfield)

Contribution ID: **28** Type: **not specified**

EU funding schemes

Thursday 17 January 2013 14:20 (20 minutes)

Presenter: HOWITT, Mark

Contribution ID: **29** Type: **not specified**

STFC Knowledge Exchange Funding Schemes

Thursday 17 January 2013 14:00 (20 minutes)

Presenter: SKARDA, Vlad (STFC)