



Hartree Centre Summer Schools, July 2014

Following the very successful Summer School in July 2013, The Hartree Centre will be hosting three separate, week long Summer Schools at STFC Daresbury Laboratory in July 2014:

Summer School	Topics
Visualization 14 th - 18 th July Led by Dr Hank Childs (LBL, Oregon) & Dr Hamish Carr (Leeds)	Visualization
	Visualization with MATLAB, VTK & VISIT
	Parallel Visualization
	Topology & Feature Extraction
High Performance Computing 21 st - 25 th July Led by Prof Jack Dongarra (Tennessee) & Dr Kirk E. Jordan (IBM)	Architectures yesterday, today and tomorrow
	Numerical linear algebra in a parallel world
	Parallel programming in MPI and OpenMP
	New parallel programming paradigms
Big Data 28 th July – 1 st August Led by Prof Alok Choudhary (Northwestern) & Chris Williams (IBM)	Big data and analytics
	Data warehousing and business intelligence
	Cognitive computing and social media analytics
	Hadoop & semi-structured data



Each week will be a mixture of lectures from internationally renowned experts and practical exercises on state of the art systems for visualization, compute and Big Data (IBM BG/Q, iDataPlex and NeXTScale systems).

Week 1: Visualization - Learn the skills necessary to develop applications that enable you to assimilate complex information quickly and easily and discover the latest visualization tools.

Week 2: HPC - Learn the skills necessary to develop applications that run on the top 20 machines of the Top500 list, now and in the future. Discover the architectures and the best technologies to use.

Week 3: Big Data - Learn about the opportunities and challenges that Big Data & Analytics presents including the chance to get hands on with the recently installed Big Data cluster at the Hartree Centre.

Come to one or more events!

Overall academic direction: Professor Jack Dongarra (*University of Tennessee*), Dr Kirk E. Jordan (*Distinguished IBM Engineer at IBM T J Watson Research Centre*), and Professor Terry Hewitt (*STFC Hartree Centre*).

Further information, including how to apply, is available at...

<https://eventbooking.stfc.ac.uk/news-events/hartree-summer-school-series-2014>

You can also follow us on twitter... @HartreeCentre
or via our web page... <http://www.stfc.ac.uk/hartree>

Local organisers: Terry Hewitt, Dave Cable and Damian Jones (*STFC Hartree Centre*)



Jack Dongarra



Kirk E. Jordan



Terry Hewitt