Advanced UK Instrumentation Training 2023

Report of Contributions

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

Monte Carlo Simulations - Allpix squared 2

Tuesday 20 June 2023 14:00 (1 hour)

Presenter: HYNDS, Daniel (University of Oxford (GB))

Session Classification: Software tools

Track Classification: Software tools

Contribution ID: 8 Type: not specified

Monte Carlo Simulations - Allpix squared 1

Tuesday 20 June 2023 13:00 (1 hour)

Presenter: HYNDS, Daniel (University of Oxford (GB))

Session Classification: Software tools

Track Classification: Software tools

Contribution ID: 9 Type: not specified

Band theory 1

Tuesday 2 May 2023 14:00 (1 hour)

Presenter: WEATHERILL, Daniel

Session Classification: Semiconductor theory

Track Classification: Semiconductor theory

Contribution ID: 10 Type: not specified

Band theory 2

Friday 5 May 2023 10:00 (1 hour)

Presenter: WEATHERILL, Daniel

Session Classification: Semiconductor theory

Track Classification: Semiconductor theory

Contribution ID: 11 Type: not specified

Device layout, guard rings, device calculations 1

Tuesday 9 May 2023 14:00 (1 hour)

Presenter: VILLANI, Enrico Giulio (Science and Technology Facilities Council STFC (GB))

Session Classification: Semiconductor theory

Track Classification: Semiconductor theory

Contribution ID: 12 Type: not specified

Device layout, guard rings, device calculations 2

Friday 12 May 2023 11:00 (1 hour)

Presenter: VILLANI, Enrico Giulio (Science and Technology Facilities Council STFC (GB))

Session Classification: Semiconductor theory

Track Classification: Semiconductor theory

Contribution ID: 13 Type: not specified

Interaction of particles with matter 1

Tuesday 16 May 2023 14:00 (1 hour)

Presenter: KRIZKA, Karol (University of Birmingham (GB))

Session Classification: Semiconductor theory

Track Classification: Semiconductor theory

Contribution ID: 14 Type: not specified

Interaction of particles with matter 2

Friday 19 May 2023 10:00 (1 hour)

Presenter: KRIZKA, Karol (University of Birmingham (GB))

Session Classification: Semiconductor theory

Track Classification: Semiconductor theory

Contribution ID: 15 Type: not specified

Ramo Shockley theory

Tuesday 23 May 2023 14:00 (1 hour)

Presenter: WINDISCHHOFER, Philipp (University of Chicago (US))

Session Classification: Semiconductor theory

Track Classification: Semiconductor theory

Contribution ID: 16 Type: not specified

Radiation damage 1

Friday 26 May 2023 10:00 (1 hour)

Presenter: GONELLA, Laura (University of Birmingham (UK))

Session Classification: Semiconductor theory

Track Classification: Semiconductor theory

Contribution ID: 17 Type: not specified

Radiation damage 2

Friday 26 May 2023 11:00 (1 hour)

Presenter: GONELLA, Laura (University of Birmingham (UK))

Session Classification: Semiconductor theory

Track Classification: Semiconductor theory

Contribution ID: 18 Type: not specified

General electronics, simple circuit calculations

Tuesday 2 May 2023 13:00 (1 hour)

Presenter: BLUMENSCHEIN, Ulla (University of London (GB))

Session Classification: Electronics and DAQ

Track Classification: Electronics and DAQ

Contribution ID: 19 Type: not specified

Circuit theory, common topologies

Friday 5 May 2023 09:00 (1 hour)

Presenter: BLUMENSCHEIN, Ulla (University of London (GB))

Session Classification: Electronics and DAQ

Track Classification: Electronics and DAQ

Contribution ID: 20 Type: not specified

Circuit design, noise and grounding

Tuesday 9 May 2023 13:00 (1 hour)

Presenter: ZHANG, Weida

Session Classification: Electronics and DAQ

Track Classification: Electronics and DAQ

Contribution ID: 21 Type: not specified

Amplifier design, TDC

Friday 12 May 2023 09:00 (1 hour)

Presenter: ZHANG, Weida

Session Classification: Electronics and DAQ

Track Classification: Electronics and DAQ

Contribution ID: 23 Type: not specified

PCB layout

Tuesday 16 May 2023 13:00 (1 hour)

Presenter: NAIK, Sneha Amogh (University of Glasgow (GB))

Session Classification: Electronics and DAQ

Track Classification: Electronics and DAQ

Contribution ID: 24 Type: not specified

Trigger and DAQ 1

Friday 19 May 2023 09:00 (1 hour)

Presenter: ROSE, Andrew

Session Classification: Electronics and DAQ

Track Classification: Electronics and DAQ

Contribution ID: 25 Type: not specified

Trigger and DAQ 2

Tuesday 23 May 2023 13:00 (1 hour)

Presenter: ROSE, Andrew

Session Classification: Electronics and DAQ

 $\textbf{Track Classification:} \ \ \textbf{Electronics and DAQ}$

Contribution ID: 26 Type: not specified

Mechanical structures 1

Tuesday 2 May 2023 16:00 (1 hour)

Presenter: VIEHHAUSER, Georg (University of Oxford (GB))

Session Classification: Mechanics and cooling

Track Classification: Mechanics and cooling

Contribution ID: 27 Type: not specified

Mechanical structures 2

Tuesday 9 May 2023 16:00 (1 hour)

Presenter: VIEHHAUSER, Georg (University of Oxford (GB))

Session Classification: Mechanics and cooling

Track Classification: Mechanics and cooling

Contribution ID: 28 Type: not specified

Thermal management 1

Friday 12 May 2023 10:00 (1 hour)

Presenter: VIEHHAUSER, Georg (University of Oxford (GB))

Session Classification: Mechanics and cooling

Track Classification: Mechanics and cooling

Contribution ID: 29 Type: not specified

Thermal management 2

Tuesday 16 May 2023 16:00 (1 hour)

Presenter: VIEHHAUSER, Georg (University of Oxford (GB))

Session Classification: Mechanics and cooling

Track Classification: Mechanics and cooling

Contribution ID: 30 Type: not specified

CAD and technical drawing

Friday 19 May 2023 12:00 (1 hour)

Presenter: BOOTH, Michael Jack (University of Oxford (GB))

Session Classification: Mechanics and cooling

Track Classification: Mechanics and cooling

Contribution ID: 31 Type: not specified

FE analysis tools

Tuesday 23 May 2023 16:00 (1 hour)

Presenter: BOOTH, Michael Jack (University of Oxford (GB))

Session Classification: Mechanics and cooling

Track Classification: Mechanics and cooling

Contribution ID: 33 Type: not specified

Device fabrication 1

Tuesday 2 May 2023 15:00 (1 hour)

Presenter: BLUE, Andrew (University of Glasgow (GB))

Session Classification: Silicon fabrication and structures

Track Classification: Silicon fabrication and structures

Contribution ID: 34 Type: not specified

Device fabrication 2

Friday 5 May 2023 11:00 (1 hour)

Presenter: BLUE, Andrew (University of Glasgow (GB))

Session Classification: Silicon fabrication and structures

Track Classification: Silicon fabrication and structures

Contribution ID: 35 Type: not specified

Device fabrication 3

Tuesday 9 May 2023 15:00 (1 hour)

Presenter: VILLANI, Enrico Giulio (Science and Technology Facilities Council STFC (GB))

Session Classification: Silicon fabrication and structures

Track Classification: Silicon fabrication and structures

Contribution ID: 36 Type: not specified

Device fabrication 4

Friday 12 May 2023 12:00 (1 hour)

Presenter: VILLANI, Enrico Giulio (Science and Technology Facilities Council STFC (GB))

Session Classification: Silicon fabrication and structures

Track Classification: Silicon fabrication and structures

Contribution ID: 37 Type: not specified

Device structures: planar and 3D

Tuesday 16 May 2023 15:00 (1 hour)

Device structures: planar and 3D

Presenter: MUNOZ SANCHEZ, Francisca (University of Manchester (GB))

Session Classification: Silicon fabrication and structures

Track Classification: Silicon fabrication and structures

Contribution ID: 38 Type: not specified

Device structures: Gain Layers (LGAD, SPAD, SiPM)

Friday 19 May 2023 11:00 (1 hour)

Device structures: Gain Layers (L · · ·

Presenter: MUNOZ SANCHEZ, Francisca (University of Manchester (GB))

Session Classification: Silicon fabrication and structures

Track Classification: Silicon fabrication and structures

Contribution ID: 39 Type: not specified

Device structures: monolithic

Tuesday 23 May 2023 15:00 (1 hour)

Device structures: monolithic

Presenter: VILELLA FIGUERAS, Eva (University of Liverpool (GB))

Session Classification: Silicon fabrication and structures

Track Classification: Silicon fabrication and structures

Contribution ID: 40 Type: not specified

Transistor layout: 250 - 28 nm, FinFETs

Friday 26 May 2023 12:00 (1 hour)

Presenter: VILELLA FIGUERAS, Eva (University of Liverpool (GB))

Session Classification: Silicon fabrication and structures

Track Classification: Silicon fabrication and structures

Contribution ID: 41 Type: not specified

Diamond detectors 1

Friday 2 June 2023 09:00 (1 hour)

Presenter: OH, Alexander (University of Manchester (GB))

Session Classification: Short topics

Track Classification: Short topics

Contribution ID: 42 Type: not specified

Diamond detectors 2

Tuesday 6 June 2023 13:00 (1 hour)

Presenter: OH, Alexander (University of Manchester (GB))

Session Classification: Short topics

Track Classification: Short topics

Contribution ID: 43 Type: not specified

Photon science applications

Tuesday 30 May 2023 14:00 (1 hour)

Presenter: HOBSON, Peter

Session Classification: Short topics

Track Classification: Short topics

Contribution ID: 44 Type: **not specified**

Other silicon devices: CCDs, Depfets, imaging sensors

Friday 9 June 2023 09:00 (1 hour)

Presenter: WEATHERILL, Daniel

Session Classification: Short topics

Track Classification: Short topics

Contribution ID: 45 Type: not specified

Dosimetry and medical applications

Tuesday 13 June 2023 13:00 (1 hour)

Presenter: TAYLOR, Jon (University of Liverpool (GB))

Session Classification: Short topics

Track Classification: Short topics

Contribution ID: 46 Type: not specified

Lab techniques: IV, CV, source and x-ray measurements 2

Friday 2 June 2023 11:00 (1 hour)

Lab techniques: IV, CV, source a $\,\cdots$

Presenter: HOMMELS, Bart (University of Cambridge (GB))

Session Classification: Experimental techniques

Track Classification: Experimental techniques

Contribution ID: 47 Type: **not specified**

Lab techniques: IV, CV, source and x-ray measurements 1

Friday 2 June 2023 10:00 (1 hour)

Lab techniques: IV, CV, source a $\,\cdots$

Presenter: HOMMELS, Bart (University of Cambridge (GB))

Session Classification: Experimental techniques

Track Classification: Experimental techniques

Contribution ID: 48 Type: not specified

Transient current techniques

Tuesday 6 June 2023 14:00 (1 hour)

Presenter: HYNDS, Daniel (University of Oxford (GB))Session Classification: Experimental techniques

Track Classification: Experimental techniques

Contribution ID: 49 Type: not specified

Solid state techniques: DLTS, TSC

Friday 9 June 2023 10:00 (1 hour)

Solid state techniques: DLTS, TSC

Presenter: HYNDS, Daniel (University of Oxford (GB))

Session Classification: Experimental techniques

Track Classification: Experimental techniques

Contribution ID: 50 Type: not specified

Testbeams 1

Friday 16 June 2023 09:00 (1 hour)

Presenters: VELTHUIS, Jaap; VELTHUIS, Johannes (University of Bristol (GB))

Session Classification: Experimental techniques

Track Classification: Experimental techniques

Contribution ID: 51 Type: not specified

Testbeams 2

Friday 16 June 2023 10:00 (1 hour)

Presenters: VELTHUIS, Jaap; VELTHUIS, Johannes (University of Bristol (GB))

Session Classification: Experimental techniques

Track Classification: Experimental techniques

Irradiation 1

Contribution ID: 52 Type: not specified

Irradiation 1

Tuesday 20 June 2023 15:00 (1 hour)

 $\begin{tabular}{ll} \textbf{Presenter:} & TAYLOR, Jon (University of Liverpool (GB)) \\ \end{tabular}$

Session Classification: Experimental techniques

Track Classification: Experimental techniques

Contribution ID: 53 Type: not specified

Irradiation 2

Friday 23 June 2023 09:00 (1 hour)

 $\begin{tabular}{ll} \textbf{Presenter:} & TAYLOR, Jon (University of Liverpool (GB)) \\ \end{tabular}$

Session Classification: Experimental techniques

Track Classification: Experimental techniques

Contribution ID: 54 Type: not specified

TCAD 1

Tuesday 30 May 2023 16:00 (1 hour)

Presenters: VILLANI, Enrico Giulio (Science and Technology Facilities Council STFC (GB)); OWEN,

nick (STFC)

Session Classification: TCAD electric field and transport simulations

Track Classification: TCAD electric field and transport simulations

TCAD 2

Contribution ID: 55 Type: not specified

TCAD 2

Friday 2 June 2023 12:00 (1 hour)

Presenters: VILLANI, Enrico Giulio (Science and Technology Facilities Council STFC (GB)); OWEN,

nick (STFC)

Session Classification: TCAD electric field and transport simulations

Track Classification: TCAD electric field and transport simulations

Contribution ID: 56 Type: not specified

TCAD 3

Tuesday 6 June 2023 16:00 (1 hour)

Presenters: VILLANI, Enrico Giulio (Science and Technology Facilities Council STFC (GB)); OWEN,

nick (STFC)

Session Classification: TCAD electric field and transport simulations

Track Classification: TCAD electric field and transport simulations

Contribution ID: 57 Type: not specified

TCAD 4

Friday 9 June 2023 12:00 (1 hour)

 $\textbf{Presenters:} \quad \text{VILLANI, Enrico Giulio (Science and Technology Facilities Council STFC (GB)); \ OWEN, \\$

nick (STFC)

Session Classification: TCAD electric field and transport simulations

Track Classification: TCAD electric field and transport simulations

Contribution ID: 58 Type: not specified

TCAD 5

Tuesday 13 June 2023 16:00 (1 hour)

Presenters: VILLANI, Enrico Giulio (Science and Technology Facilities Council STFC (GB)); OWEN,

nick (STFC)

Session Classification: TCAD electric field and transport simulations

Track Classification: TCAD electric field and transport simulations

Contribution ID: 59 Type: not specified

TCAD 6

Friday 16 June 2023 12:00 (1 hour)

Presenters: VILLANI, Enrico Giulio (Science and Technology Facilities Council STFC (GB)); OWEN,

nick (STFC)

Session Classification: TCAD electric field and transport simulations

Track Classification: TCAD electric field and transport simulations

Contribution ID: 60 Type: not specified

TCAD 7

Tuesday 20 June 2023 16:00 (1 hour)

 $\textbf{Presenters:} \quad \text{VILLANI, Enrico Giulio (Science and Technology Facilities Council STFC (GB)); \ OWEN, \\$

nick (STFC)

Session Classification: TCAD electric field and transport simulations

Track Classification: TCAD electric field and transport simulations

Contribution ID: 61 Type: not specified

TCAD 8

Friday 23 June 2023 12:00 (1 hour)

Presenters: VILLANI, Enrico Giulio (Science and Technology Facilities Council STFC (GB)); OWEN,

nick (STFC)

Session Classification: TCAD electric field and transport simulations

Track Classification: TCAD electric field and transport simulations

Contribution ID: 62 Type: not specified

PCB design - KiCAD 1

Tuesday 30 May 2023 13:00 (1 hour)

Presenter: WEATHERILL, Daniel

Session Classification: Software tools

Track Classification: Software tools

Contribution ID: 63 Type: not specified

PCB design - KiCAD 2

Tuesday 30 May 2023 15:00 (1 hour)

Presenter: WEATHERILL, Daniel

Session Classification: Software tools

Track Classification: Software tools

Contribution ID: 64 Type: not specified

SPICE simulations - LTSpice 1

Tuesday 6 June 2023 15:00 (1 hour)

Presenter: ZHANG, Weida

Session Classification: Software tools

Track Classification: Software tools

Contribution ID: 65 Type: not specified

SPICE simulations - LTSpice 2

Friday 9 June 2023 11:00 (1 hour)

Presenter: ZHANG, Weida

Session Classification: Software tools

Track Classification: Software tools

Contribution ID: 66 Type: not specified

Testbeam reconstruction - Corryvreckan 1

Friday 23 June 2023 10:00 (1 hour)

Presenter: WRAIGHT, Kenneth Gibb (University of Glasgow (GB))

Session Classification: Software tools

Track Classification: Software tools

Contribution ID: 67 Type: not specified

Testbeam reconstruction - Corryvreckan 2

Friday 23 June 2023 11:00 (1 hour)

Presenter: WRAIGHT, Kenneth Gibb (University of Glasgow (GB))

Session Classification: Software tools

Track Classification: Software tools

Contribution ID: 68 Type: not specified

FPGA Overview

Friday 26 May 2023 09:00 (1 hour)

Presenter: ROSE, Andrew

Session Classification: Electronics and DAQ

Track Classification: Electronics and DAQ