Advanced UK Instrumentation Training 2025

Report of Contributions

Advanced UK In · · · / Report of Contributions

Monte Carlo Simulations - Allpix ···

Contribution ID: 7

Type: not specified

Monte Carlo Simulations - Allpix squared 2

Tuesday 17 June 2025 14:00 (1 hour)

Presenter: HYNDS, Daniel (University of Oxford (GB)) **Session Classification:** Software tools

Monte Carlo Simulations - Allpix ···

Contribution ID: 8

Type: not specified

Monte Carlo Simulations - Allpix squared 1

Tuesday 17 June 2025 13:00 (1 hour)

Presenter: HYNDS, Daniel (University of Oxford (GB)) **Session Classification:** Software tools

Band theory 1

Contribution ID: 9

Type: not specified

Band theory 1

Tuesday 6 May 2025 16:00 (1 hour)

Presenter: WEATHERILL, Daniel

Session Classification: Semiconductor theory

Band theory 2

Contribution ID: 10

Type: not specified

Band theory 2

Tuesday 13 May 2025 16:00 (1 hour)

Presenter: WEATHERILL, Daniel

Session Classification: Semiconductor theory

Device layout, guard rings, device …

Contribution ID: 11

Type: not specified

Device layout, guard rings, device calculations 1

Friday 16 May 2025 12:00 (1 hour)

Presenter: VILLANI, Enrico Giulio (Science and Technology Facilities Council STFC (GB)) **Session Classification:** Semiconductor theory

Device layout, guard rings, device …

Contribution ID: 12

Type: not specified

Device layout, guard rings, device calculations 2

Tuesday 20 May 2025 15:00 (1 hour)

Presenter: VILLANI, Enrico Giulio (Science and Technology Facilities Council STFC (GB)) **Session Classification:** Semiconductor theory Advanced UK In · · · / Report of Contributions

Interaction of particles with matter 1

Contribution ID: 13

Type: not specified

Interaction of particles with matter 1

Friday 23 May 2025 11:00 (1 hour)

Presenter: KRIZKA, Karol (University of Birmingham (GB)) **Session Classification:** Semiconductor theory Advanced UK In · · · / Report of Contributions

Interaction of particles with matter 2

Contribution ID: 14

Type: not specified

Interaction of particles with matter 2

Friday 23 May 2025 12:00 (1 hour)

Presenter: KRIZKA, Karol (University of Birmingham (GB)) **Session Classification:** Semiconductor theory

Ramo Shockley theory

Contribution ID: 15

Type: not specified

Ramo Shockley theory

Tuesday 20 May 2025 16:00 (1 hour)

Presenter: WINDISCHHOFER, Philipp (University of Chicago (US)) **Session Classification:** Semiconductor theory

Radiation damage 1

Contribution ID: 16

Type: not specified

Radiation damage 1

Friday 30 May 2025 10:00 (1 hour)

Presenter: CHISHOLM, Andrew Stephen (University of Birmingham (GB)) **Session Classification:** Semiconductor theory

Radiation damage 2

Contribution ID: 17

Type: not specified

Radiation damage 2

Friday 30 May 2025 11:00 (1 hour)

Presenter: CHISHOLM, Andrew Stephen (University of Birmingham (GB)) **Session Classification:** Semiconductor theory Advanced UK In · · · / Report of Contributions

General electronics, simple circuit …

Contribution ID: 18

Type: not specified

General electronics, simple circuit calculations

Tuesday 6 May 2025 13:00 (1 hour)

Presenter: BLUMENSCHEIN, Ulla (University of London (GB)) **Session Classification:** Electronics and DAQ

Circuit theory, common topologies

Contribution ID: 19

Type: not specified

Circuit theory, common topologies

Friday 9 May 2025 09:00 (1 hour)

Presenter: BLUMENSCHEIN, Ulla (University of London (GB)) **Session Classification:** Electronics and DAQ

Circuit design, noise and grounding

Contribution ID: 20

Type: not specified

Circuit design, noise and grounding

Tuesday 13 May 2025 13:00 (1 hour)

Presenter: ZHANG, Weida (University of Oxford (GB)) **Session Classification:** Electronics and DAQ

Amplifier design, TDC

Contribution ID: 21

Type: not specified

Amplifier design, TDC

Friday 16 May 2025 09:00 (1 hour)

Presenter: ZHANG, Weida (University of Oxford (GB)) **Session Classification:** Electronics and DAQ

PCB layout

Contribution ID: 23

Type: not specified

PCB layout

Tuesday 20 May 2025 13:00 (1 hour)

Presenter: NAIK, Sneha Amogh (University of Glasgow (GB)) **Session Classification:** Electronics and DAQ

Trigger and DAQ 1

Contribution ID: 24

Type: not specified

Trigger and DAQ 1

Friday 23 May 2025 09:00 (1 hour)

Presenter: ROSE, Andrew

Session Classification: Electronics and DAQ

Trigger and DAQ 2

Contribution ID: 25

Type: not specified

Trigger and DAQ 2

Tuesday 27 May 2025 13:00 (1 hour)

Presenter: ROSE, Andrew

Session Classification: Electronics and DAQ

Mechanical structures 1

Contribution ID: 26

Type: not specified

Mechanical structures 1

Tuesday 6 May 2025 14:00 (1 hour)

Mechanical structures 2

Contribution ID: 27

Type: not specified

Mechanical structures 2

Friday 9 May 2025 10:00 (1 hour)

Thermal management 1 [TBC]

Contribution ID: 28

Type: not specified

Thermal management 1 [TBC]

Tuesday 13 May 2025 14:00 (1 hour)

Thermal management 2

Contribution ID: 29

Type: not specified

Thermal management 2

Friday 16 May 2025 10:00 (1 hour)

Device fabrication 1 [TBC]

Contribution ID: 33

Type: not specified

Device fabrication 1 [TBC]

Tuesday 6 May 2025 15:00 (1 hour)

Presenter: BLUE, Andrew (University of Glasgow (GB)) **Session Classification:** Silicon fabrication and structures

Device fabrication 2 [TBC]

Contribution ID: 34

Type: not specified

Device fabrication 2 [TBC]

Friday 9 May 2025 11:00 (1 hour)

Presenter: BLUE, Andrew (University of Glasgow (GB)) **Session Classification:** Silicon fabrication and structures

Device fabrication 3

Contribution ID: 35

Type: not specified

Device fabrication 3

Tuesday 13 May 2025 15:00 (1 hour)

Presenter: VILLANI, Enrico Giulio (Science and Technology Facilities Council STFC (GB)) **Session Classification:** Silicon fabrication and structures

Device fabrication 4

Contribution ID: 36

Type: not specified

Device fabrication 4

Friday 16 May 2025 11:00 (1 hour)

Presenter: VILLANI, Enrico Giulio (Science and Technology Facilities Council STFC (GB)) **Session Classification:** Silicon fabrication and structures

Device structures: planar and 3D

Contribution ID: 37

Type: not specified

Device structures: planar and 3D

Tuesday 20 May 2025 14:00 (1 hour)

Presenter: MUNOZ SANCHEZ, Francisca (The University of Manchester (GB)) **Session Classification:** Silicon fabrication and structures Advanced UK In ··· / Report of Contributions

Device structures: Gain Layers (L ···

Contribution ID: 38

Type: not specified

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

Friday 23 May 2025 10:00 (1 hour)

Presenter: MUNOZ SANCHEZ, Francisca (The University of Manchester (GB)) **Session Classification:** Silicon fabrication and structures Advanced UK In · · · / Report of Contributions

Device structures: monolithic

Contribution ID: 39

Type: not specified

Device structures: monolithic

Tuesday 27 May 2025 14:00 (1 hour)

Presenter: VILELLA FIGUERAS, Eva (University of Liverpool (GB)) **Session Classification:** Silicon fabrication and structures Advanced UK In ··· / Report of Contributions

Transistor layout: 250 - 28 nm, Fi $\,\cdots\,$

Contribution ID: 40

Type: not specified

Transistor layout: 250 - 28 nm, FinFETs

Tuesday 27 May 2025 15:00 (1 hour)

Presenter: VILELLA FIGUERAS, Eva (University of Liverpool (GB)) **Session Classification:** Silicon fabrication and structures

Diamond detectors 1

Contribution ID: 41

Type: not specified

Diamond detectors 1

Friday 6 June 2025 09:00 (1 hour)

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

Session Classification: Short topics

Diamond detectors 2

Contribution ID: 42

Type: not specified

Diamond detectors 2

Tuesday 10 June 2025 13:00 (1 hour)

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

Session Classification: Short topics

Photon science applications

Contribution ID: 43

Type: not specified

Photon science applications

Tuesday 3 June 2025 13:00 (1 hour)

Presenter: HOBSON, Peter **Session Classification:** Short topics Advanced UK In ··· / Report of Contributions

Other silicon devices: CCDs, Dep \cdots

Contribution ID: 44

Type: not specified

Other silicon devices: CCDs, Depfets, imaging sensors

Tuesday 17 June 2025 16:00 (1 hour)

Presenter: WEATHERILL, Daniel **Session Classification:** Short topics

Dosimetry and medical applications

Contribution ID: 45

Type: not specified

Dosimetry and medical applications

Friday 20 June 2025 09:00 (1 hour)

Presenter: TAYLOR, Jon (University of Liverpool (GB)) **Session Classification:** Short topics Advanced UK In ··· / Report of Contributions

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

Contribution ID: 46

Type: not specified

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

Friday 6 June 2025 11:00 (1 hour)

Presenter: HOMMELS, Bart (University of Cambridge (GB)) **Session Classification:** Experimental techniques Advanced UK In ··· / Report of Contributions

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

Contribution ID: 47

Type: not specified

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

Friday 6 June 2025 10:00 (1 hour)

Presenter: HOMMELS, Bart (University of Cambridge (GB)) **Session Classification:** Experimental techniques

Transient current techniques

Contribution ID: 48

Type: not specified

Transient current techniques

Friday 13 June 2025 11:00 (1 hour)

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

Solid state techniques: DLTS, TSC

Contribution ID: 49

Type: not specified

Solid state techniques: DLTS, TSC

Friday 13 June 2025 10:00 (1 hour)

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

Testbeams 1

Contribution ID: 50

Type: not specified

Testbeams 1

Friday 20 June 2025 10:00 (1 hour)

Presenters: VELTHUIS, Jaap; VELTHUIS, Johannes (University of Bristol (GB)) **Session Classification:** Experimental techniques

Testbeams 2

Contribution ID: 51

Type: not specified

Testbeams 2

Friday 20 June 2025 11:00 (1 hour)

Presenters: VELTHUIS, Jaap; VELTHUIS, Johannes (University of Bristol (GB)) **Session Classification:** Experimental techniques

Irradiation 1

Contribution ID: 52

Type: not specified

Irradiation 1

Friday 27 June 2025 11:00 (1 hour)

Presenter:TAYLOR, Jon (University of Liverpool (GB))Session Classification:Experimental techniques

Irradiation 2

Contribution ID: 53

Type: not specified

Irradiation 2

Friday 27 June 2025 10:00 (1 hour)

Presenter:TAYLOR, Jon (University of Liverpool (GB))Session Classification:Experimental techniques

TCAD 1

Contribution ID: 54

Type: not specified

TCAD 1

Tuesday 3 June 2025 14:00 (1 hour)

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

TCAD 2

Contribution ID: 55

Type: not specified

TCAD 2

Friday 6 June 2025 12:00 (1 hour)

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

TCAD 3

Contribution ID: 56

Type: not specified

TCAD 3

Tuesday 10 June 2025 16:00 (1 hour)

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

TCAD 4

Contribution ID: 57

Type: not specified

TCAD 4

Friday 13 June 2025 12:00 (1 hour)

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

TCAD 5

Contribution ID: 58

Type: not specified

TCAD 5

Tuesday 17 June 2025 15:00 (1 hour)

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

TCAD 6

Contribution ID: 59

Type: not specified

TCAD 6

Friday 20 June 2025 12:00 (1 hour)

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

TCAD 7

Contribution ID: 60

Type: not specified

TCAD 7

Tuesday 24 June 2025 16:00 (1 hour)

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

TCAD 8

Contribution ID: 61

Type: not specified

TCAD 8

Friday 27 June 2025 12:00 (1 hour)

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

PCB design - KiCAD 1

Contribution ID: 62

Type: not specified

PCB design - KiCAD 1

Tuesday 3 June 2025 15:00 (1 hour)

Presenter: WEATHERILL, Daniel Session Classification: Software tools

PCB design - KiCAD 2

Contribution ID: 63

Type: not specified

PCB design - KiCAD 2

Tuesday 3 June 2025 16:00 (1 hour)

Presenter: WEATHERILL, Daniel Session Classification: Software tools

April 28, 2025

SPICE simulations - LTSpice 1

Contribution ID: 64

Type: not specified

SPICE simulations - LTSpice 1

Tuesday 10 June 2025 14:00 (1 hour)

Presenter: ZHANG, Weida (University of Oxford (GB)) **Session Classification:** Software tools

SPICE simulations - LTSpice 2

Contribution ID: 65

Type: not specified

SPICE simulations - LTSpice 2

Tuesday 10 June 2025 15:00 (1 hour)

Presenter: ZHANG, Weida (University of Oxford (GB)) **Session Classification:** Software tools

Testbeam reconstruction - Corry ...

Contribution ID: 66

Type: not specified

Testbeam reconstruction - Corryvreckan 1

Tuesday 24 June 2025 14:00 (1 hour)

Presenter: WRAIGHT, Kenneth Gibb (University of Glasgow (GB)) **Session Classification:** Software tools Advanced UK In · · · / Report of Contributions

Testbeam reconstruction - Corry ...

Contribution ID: 67

Type: not specified

Testbeam reconstruction - Corryvreckan 2

Tuesday 24 June 2025 15:00 (1 hour)

Presenter: WRAIGHT, Kenneth Gibb (University of Glasgow (GB)) **Session Classification:** Software tools Advanced UK In · · · / Report of Contributions

FPGA Overview

Contribution ID: 68

Type: not specified

FPGA Overview

Friday 30 May 2025 09:00 (1 hour)

Presenter: ROSE, Andrew

Session Classification: Electronics and DAQ