

Conference Programme

17th May - Training



Time (BST)	Title	Presenter
Click here to join the Training Session		
Chair: Wenjuan Sun & David Gorman		
09:00 - 10:00	<i>ISO Geometrical Product Specification (ISO GPS). An investigation into size abstract</i>	Iain Macleod Chair of the ISO/TC 213 technical committee (responsible for ISO GPS standards)
10:00 - 11:00	<i>CT advancements for production line measurement</i>	Chris Price Nikon Metrology
11:00 - 11:15	Break	
11:15 - 12:15	<i>Virtual CT with "aRTist" abstract</i>	Carsten Bellon Bundesanstalt für Materialforschung und -prüfung, Germany
12:15 - 13:00	Lunch	
13:00 - 14:00	<i>What's new in Volume Graphics' VGSTUDIO MAX 3.5</i>	Ashley Bray, Volume Graphics
14:00 - 15:00	<i>Introduction of TIGRE image reconstruction toolbox for dimensional XCT application abstract</i>	Manuchehr Soleimani, University of Bath Ander Biguri, UCL

Conference Programme

18th May - Session I



Time (BST)	Title [MS Teams Breakout/Poster/Virtual Booth]	Presenter [email]
09:00 - 09:05	Conference Open	Wenjuan Sun
09:05 - 09:10	Welcome Talk	Ben Hughes
Session 1: Metrology and Advanced Technology Session chair: Wenjuan Sun		
Keynote 1:		
09:10 - 09:40	#01 <i>Dimensional X-ray CT and advanced materials manufacturing - abstract</i>	Philip J. Withers
09:40 - 09:55	#02 <i>A critical assessment of the "improved two-spheres method" for the determination of a structural resolution for dXCT - abstract</i>	René Laquai
09:55 - 10:10	#03 <i>Improving the accuracy of dimensional measurements with high resolution X-ray computed tomography microscopes - abstract</i>	Herminso Villarraga-Gómez
10:10 - 10:25	#04 <i>Determination of structural resolution from reconstructed volume data - abstract</i>	Joachim Stopp
10:25 - 10:40	Break	
10:40 - 10:45	Announcement: Introducing the National Facility in X-ray CT	Jay Warnett
10:45 - 11:00	#05 <i>High-resolution x-ray tomography through super-resolution - abstract</i>	Till Dreier
11:00 - 11:15	#06 <i>Tomographic Imaging Performed Using A Laser Wakefield Driven X-ray Source - abstract</i>	Christopher Thornton
11:15 - 11:30	#07 <i>Applying the appropriate correction mapping for volumetric surface compensation on additively manufactured parts - abstract</i>	Gerd Schwaderer
11:30 - 11:45	#08 <i>Geometry Estimation for Fixed-Gantry CT Scanner - abstract</i>	Wail Mustafa
11:45 - 12:00	Break	
Breakout Rooms: #01 - #02 - #03 - #04 - #05 - #06 - #07 - #08		
Poster 1: <i>Investigation of the partial volume effect on XCT metrology of AM surfaces - abstract</i>		
Go to Poster Session - View the extended abstract		
12:00 - 12:30	Poster 2: <i>Effect of detector in-plane rotation misalignment on dimensional measurements using helical CT acquisition - abstract</i>	Xiao Chen
Go to Poster Session - View the extended abstract		
Virtual Booth: Nikon		Virtual Booth: North Star Imaging
Virtual Booth: Volume Graphics		Virtual Booth: ThermoFisher Scientific
Virtual Booth: CCPi		
12:30 - 13:00	Lunch	

Conference Programme

18th May - Session 2



Time (BST)	Title [MS Teams Breakout/Poster/Virtual Booth]		Presenter [email]
Session 2: Traceability and Calibration Session chair: Martin Turner			
13:00-13:05	Commercial Talk:	CCPi Tomographic Imaging	Edoardo Pasca
13:05-13:10	Commercial Talk:	North Star Imaging	Guy Tolley
13:10-13:15	Commercial Talk:	Nikon Metrology	Richard Frisk
13:15-13:20	Commercial Talk:	Hamamatsu	Simon Whitbread
Keynote 2			
13:20 - 13:50	#09	<i>EMPIR AdvanCT – Project overview and CT-corrections developed by PTB - abstract</i>	Ulrich Neuschaefer-Rube
13:50 - 14:05	#10	<i>Traceable sub-microfocus X-ray focal spot reconstruction by circular edge analysis - abstract</i>	Felix Meli
14:05 - 14:20	#11	<i>Calibration of X-ray computed tomography for surface texture measurement using metrological characteristics - abstract</i>	Adam Thompson
14:20 - 14:35	#12	<i>Novel Method to Assess Segmentation Routines in a Multi-material Component - abstract</i>	David Gorman
14:35 - 14:50	#13	<i>EMPIR AdvanCT - CT measurement uncertainty of freeform surfaces - abstract</i>	Josef Frese
14:50 - 14:55	Day 2 – Closing Announcements		
14:55 - 15:10	Break		
Breakout Rooms: #09 - #10 - #11 - #12 - #13			
15:10 - 15:40	Poster 3:	<i>MPE statements for metrology XCT systems - abstract</i> <i>Go to Poster Session - View the extended abstract</i>	Evelien Zwanenburg
	Poster 4:	<i>Visualisation and interpretation of volumetric differences - abstract</i> <i>Go to Poster Session - View the extended abstract</i>	Gerd Schwaderer
	Virtual Booth: Nikon	Virtual Booth: North Star Imaging	
	Virtual Booth: Volume Graphics	Virtual Booth: ThermoFisher Scientific	
	Virtual Booth: CCPi		

Conference Programme

19th May - Session 3



Time (BST)	Title [MS Teams Breakout/Poster/Virtual Booth]	Presenter [email]
09:00 - 09:05	Morning Announcements	
Session 3: Applications		
Session chair: Paul Bills		
Keynote 3		
09:05 - 09:35	#14 <i>X-ray computed tomography for aerospace applications - abstract</i>	Wenjuan Sun
09:35 - 09:50	#15 <i>Automatic Defect Recognition and Sentencing of Low Density Materials used in HED Physics Experiments - abstract</i>	Leigh J. Reed
09:50 - 10:05	#16 <i>The surface area and localised 3D roughness of a highly structured surface using X-Ray Computed tomography (XCT) - abstract</i>	John .W. McBride
10:05 - 10:20	#17 <i>Improvement of reconstruction results using prior information from CAD model for sparse-view Computed Tomography - abstract</i>	Julie Escoda
10:20 - 10:35	#18 <i>Case study about the influence of temperature and humidity for dimensional measurements on polymer parts - abstract</i>	Lorenzo Carli
10:35 - 10:40	Commercial Talk: Diondo	Nick Brierley
10:40 - 10:45	Commercial Talk: Volume Graphics	Gerd Schwaderer
10:45 - 10:50	Commercial Talk: Thermo Fisher Scientific	John Carron
10:50 - 10:55	Commercial Talk: Tescan	Lars Oliver Kautschor
10:55 - 11:20	Break	
	Breakout Rooms: #14 - #15 - #16 - #17 - #18	
	Poster 4: <i>Visualisation and interpretation of volumetric Differences - abstract</i>	Gerd Schwaderer
	<i>Go to Poster Session - View the extended abstract</i>	
11:20 - 11:50	Poster 1: <i>Investigation of the partial volume effect on XCT metrology of AM surfaces - abstract</i>	Xiao Chen
	<i>Go to Poster Session - View the extended abstract</i>	
	Virtual Booth: Nikon	Virtual Booth: North Star Imaging
	Virtual Booth: Volume Graphics	Virtual Booth: ThermoFisher Scientific
	Virtual Booth: CCPi	
11:50 - 12:30	Lunch	

Conference Programme

19th May - Session 4



Time (BST)	Title [MS Teams Breakout/Poster/Virtual Booth]	Presenter [email]
Session 4: Traceability and Modelling		
Session chair: Jay Warnett		
Keynote 4		
12:30 - 13:00	#20 <i>Methods for traceable compensation of machine geometry deviations in industrial computed tomography - abstract</i>	Benjamin A. Bircher
13:00 - 13:15	#21 <i>9 Degree of freedom characterisation of xCT and uncertainty for co-ordinate system using GUM approach - abstract</i>	Ville Heikkinen
13:15 - 13:30	#22 <i>AdvanCT virtual CT - abstract</i>	Carsten Bellon
13:30 - 13:45	#23 <i>Integration of geometric deviations of system components with a reduced set of parameters for computed tomography simulations in aRTist - abstract</i>	Felix Binder
13:45 - 14:00	#24 <i>The application of watershed algorithm in surface determination in XCT dimensional metrology - abstract</i>	Xiuyuan Yang
14:00 - 14:15	Coffee Break	
Breakout Rooms: #20 - #21 - #22 - #23 - #24		
14:15 - 14:45	Poster 2: <i>Effect of detector in-plane rotation misalignment on dimensional measurements using helical CT acquisition - abstract</i> <i>Go to Poster Session - View the extended abstract</i>	Pavel Blazek
	Poster 3: <i>MPE statements for metrology XCT systems - abstract</i> <i>Go to Poster Session - View the extended abstract</i>	Evelien Zwanenburg
	Virtual Booth: Nikon	Virtual Booth: North Star Imaging
	Virtual Booth: Volume Graphics	Virtual Booth: ThermoFisher Scientific
	Virtual Booth: CCPi	
14:45 - 15:00	Update on ISO standards	Sarah Kelly
15:00 - 15:30	Panel discussion/question time	Lead by Adam Thompson
15:30 - 15:40	Awards	Wenjuan Sun
15:40 - 15:50	Announcement: Future events	Tristan Lowe
15:50 - 16:00	Conference Close	Wenjuan Sun