

JULY 26, 2021



WELCOME AND MEDSI2020 OVERVIEW



YIFEI JASKI

Principal Mechanical Engineer
MEDSI2020 Conference Chair
Argonne National Laboratory

THE ORIGINAL MEDSI2020

July 13-17, 2020, Fairmont Chicago, Millennium Park

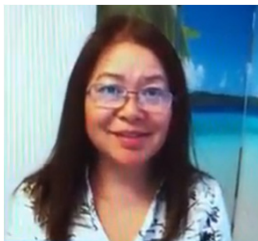


COVID-19 CHANGED MEDSI2020 TWICE

- MEDSI2020 postponed a year to **July 26-30, 2021**, at the same venue, same program
- MEDSI2020 in-person conference turned into Virtual Edition **July 26-29, 2021**

GREAT TEAM MADE IT HAPPEN

Canceling the in-person conference and planning a virtual conference



Yifei Jaski
Chair



Kelly Jaje
JACoW Editor



Lynnean Celmer
Event Planner



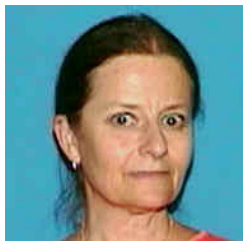
Christine McGhee
Budget



Connie Vanni
Exhibition Manager



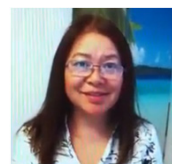
Pat Den Hartog



Marion White



Patti Cameli
Budget



Kamlesh Suthar



Konrad Witek

Jie Liu

MEDSI2020 LOC

Weekly Whova Planning Group

VIRTUAL CONFERENCE TURN OUT

- Over 450 registered attendees, highest in MEDSI history!
- Over 20 college students
- 169 submitted abstracts
- Authors from 18 different countries and 40 facilities/Organizations

SCIENTIFIC PROGRAM

UTC - 5 Chciago		MEDSI 2020 - Virtual Conference Agenda																															
Day		Monday, July 26				Tuesday, July 27				Wednesday, July 28				Thursday, July 29																			
9:00																																	
		Welcome and Overview of the Conference- Stephen Streiffner, Yifan Jaski (APS)				TUPA Tuesday AM poster session A				WEPA Wednesday AM poster session A																							
9:40																																	
10:00		MOIO - Chair: Kahan Tavakoli, Co-Chair: Mike Fisher				TUJO - Chair: Lin Zhang, Co-chair: Curt Preissner				WBO - Chair: Will Hutcheson, Co-Chair: Gary Navrotsky				THO - Chair:Derrin Shu, Co-Chair: Steve Kearney																			
4:00 min		Keynote #1: Superconducting Undulators - A Novel Source of Radiation for Synchrotron and FEL Light Sources -Efim Gluskin (ANL)				Keynote #2: System and Subsystem Engineering of Long Baseline Detectors -Fabrice Matchard (LBL)				Keynote #3: The Extremely Brilliant Source (EBS) Project -Jean-Claude Blais (ESRF)				Keynote#4: Design of Next Generation Beam Line Equipment by Applying Advanced Mechatronic Principles -Theo Ruijl (MIP-Partners)																			
10:40		Invited #1: BM18, The New ESRF-EBS Beamline For Hierarchical Phase-Contrast Tomography -Filippo Cianciosi (ESRF)				Invited #2: Mechatronics Approach for the Development of a Nano-Active-Stabilization-System -Thomas Dehaeze (ESRF)				Invited #3: LCLS Chemrx in-Vacuum Liquid Sample Delivery System -Hengzi Wang (SLAC)				Invited #4: Determination of Operating Conditions of the Compact High Repetition Rate Wakefield Accelerator Using Electromagnetic Heating and Multiphysics Approach -Kamlesh Suthar (APS)																			
		10 min Break				10 min Break				10 min Break				10 min Break																			
11:20		MOOA - session A: Insertion Device and Storage Ring Chair: John Grimmer, Co-Chair: Greg Wienersstage				MOOB - Session B: Optics Chair: Mike Fisher, Co-Chair: Jonathan Knopp				TUOA - Session A: Core Technology Chair: Kamlesh Suthar, Co-Chair: Soorhong Lee				TUOB - Session B: Stability Issues and Vibration Chair: Curt Preissner, Co-Chair: Sunil Bean				WEOA - Session A: New and upgrade facilities Chair: Dana Capatina, Co-Chair: Oliver Schmidt				WEOB - Session B: End Station Instrumentation Chair:Gary Navrotsky, Co-Chair: Erika Benda				THOA - Session A: Precision Mechanics Chair: Steve Kearney, Co-Chair: Altaf Khan				THOB - Session B: Simulation Chair:Kamlesh Suthar, Co-Chair: Jason Lerch			
6:00 min		Overcoming Challenges During the Insertion Device (ID) Straight Section Component Production and Tuning Phase of the Advanced Photon Source Upgrade (APSU) -Jason Lerch (APS)				ESRF Double Crystal Monochromator - Design and Working Modes -Robert Baker (ESRF)				Surface Twist Characterization and Compensation of an Elliptically Bent Hard X-Ray Mirror -Zhen Guo (ANL)				Exactly constrained KB Mirrors for SimuLCLS Beamlines: Design and Commissioning of the TARUMAF Station Nonfocusing Optics at the CARNAASBA Beamline -Gabriel Moreno (JNLS)				CAD Integration for PETRA-IV -Gernot List (DESY)				Engineering Challenges in BioSAXS for Australian Synchrotron -Gutharshan Venkatesan (ANSTO)				A Family of High-Stability Granite Stages for Synchrotron Applications -Curt Preissner (APS)				Thermal Contact Conductance in a Typical Silicon Crystal Assembly Found in Particle Accelerators -Pablo Sanchez Navarro (DIAMOND)			
1:00 min		Experience with the Vacuum System for the First-Fourth Generation Light Source: MAX IV -Shraq Al-Dmour (MAXIV)				ALBA BL20 New Monochromator Design -Alejandro Orsini (ALBA)				Conceptual Design of the Cavity Mechanical System for Cavity-Based X-Ray Free Electron Laser -Derrin Shu (ANL)				Development of a Passive Tuned Mass Damper for Ultra-high Vacuum Beamline Optics -Farha Khan (DIAMOND)				Design of Girders for Magnet Support on the New Upgrade Lattice at SLS -Jean-Luc Giorgetta (SOLEIL)				Flexible X-ray Focusing using CRL Transducers for in situ QI-SAXS/WAXS Experiments at MINAS-PS3 -Jan Ruback (DESY)				A New Traveling Interferometric Scheme for the APS Upgrade at the 2-50 Biomacgrega -Sunil Bean (APS)				Heat Load Simulation for General Used Optics Materials at European XFEL -Fan Yang (XFEL)			
1:00 min		Design Study of Vacuum System for a 4th Generation Storage Ring in Korea -Taekyun Ha (POSTECH)				Bendable KB Type Focusing Mirrors Designed for TFS-B Beamline -Tse-Chuan Tseng (NSRRC)				Zero-Length Confocal Pin-Type Nonseparable Gutter Pump Coated with Oxygen-Free Palladium Titanium -Jiaojiao Ma (JHE)				Ultra-Precision Mechanics for Fourth-Generation Sources -Ralph Doebermann (DESY)				Updated High Heat Load Front-Ends for SLS -David Just (PSI)				Development of a Linear Fast Shutter for BM02 at ESRF and BEATS at SESAME -Carlos Muñoz Pequeño (ESRF)				Status Report on the Sinus Beamlines Alignment -Gustavo Rovigatti de Oliveira (CNPEM)				Innovative and Biologically Inspired Petra IV Girders Design -Simone Andersen (AWI)			
12:20		One hour break																Closing Session (30 min) Brad Mountford (IOC chair) and Yifan Jaski (MEDSI chair)															
13:20																																	
14:20		MOPB Monday PM poster session B																TUPB Tuesday PM poster session B				WEPB Wednesday PM poster session B											
14:20		MOPC Monday PM poster session C																TUPC Tuesday PM poster session C				WEPC Wednesday PM poster session C											
15:20																																	



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1946–2021

WELCOME FROM APS DIRECTOR

Stephen Streiffer

**Deputy Laboratory Director for Science &
Technology and Interim Associate Laboratory
Director for Photon Science**



SYSTEMS USED IN MEDSI2020 VIRTUAL CONFERENCE

- JACoW SPMS: For publication
 - For abstract, paper, poster, oral slides submission for publish in JACoW proceedings
- CVENT MEDSI2020 main website
 - Registration and payment system and general information
- Whova: Virtual conference platform
 - Oral presentation use **Zoom**
 - Poster presentation live stream use **BlueJeans**
 - Exhibitor live presentation using their own streaming tools
 - The email to login to Whova
 - For general attendee, it is the email you register in CVENT
 - For oral and poster presenter, it is the SPMS profile email

MEDSI2020 JACOW EDITORS



Kelly Jaje
Chief Editor



Volker Schaa
SPMS
Wizard



Cathy Eyberger



Maria Power

THANKS TO OUR SPONSORS

- Exhibitors are MEDSI2020 sponsors
 - 22 Exhibitors
 - Many have very well-built booth
 - Make sure to visit exhibitors
 - Live stream time is listed at each booth and will be announced daily
- **Special thanks to “UHV Design Ltd” who made a generous contribution to MEDSI2020 virtual conference**

WHOVA SPECIFICS LIVE DEMO

- Login to Whova
- Agenda, zoom link
- Poster, live stream link using BlueJeans
- Exhibitors
- Resources
 - Abstract booklet
 - Synoptic
 - DOT board
- Community
 - Job posting
- Announcements

ACKNOWLEDGEMENT

- Thanks to Keihan Tavakoli (SOLEIL, MEDSI2018 Chair) for passing down the knowledge on conference planning
- Thanks to Regis Terenzi Neuenschwander (Brazilian Synchrotron, IPAC21 LOC Chair) for Whova help
- Thanks to Loretta Cokeley (APS MED) for all the administrative supports
- Thanks to all SPC members for reviewing all abstracts and developing scientific program
- Thanks to all IPC members and IOC members for guidance
- Thanks to all Session Chairs and Co-Chairs
- Thanks to all exhibitors/sponsors for sponsorship and putting up great exhibitions
- Thanks to all attendees!

MONDAY PLENARY

Session Chair: Keihan Tavakoli
MEDSI 2018 Conference Chair
Head of the Mechanical Engineering Group
SOLEIL Synchrotron

