

# DOE-NP SBIR/STTR Exchange Meeting

August 17-19, 2021

via Zoom

## Meeting Agenda-Day 1

Time (EDT)	Dur. (min)		Speaker	Organization	NP SBIR/ STTR Topic	Grant Status
<b>Tuesday, August 17, 2021</b>						
10:00 AM	1	Welcome and Introductory Remarks	Hallman, Timothy	DOE, Office of Nuclear Physics		
10:01 AM	4	Welcome and Introductory Remarks	Farkhondeh, Manouchehr	DOE, Office of Nuclear Physics		
10:05 AM	35	<b>NP SBIR/STTR Program Overview</b>	Shinn, Michelle	DOE, Office of Nuclear Physics		
10:40 AM	20	Nuclear Physics Gamma-ray Imaging System for Real-Time Rare Isotope Harvesting, Monitoring and Radiochemical Separation	Hull, Ethan	PHDs Co., TN	Instrumentation	End Year 2
11:00 AM	20	Low Cost, High-Density Digital Electronics for Nuclear Physics	Skulski, Wojtek	SkuTek Instrumentation, NY	Electronics	End Year 2/PH IIB/
11:20 AM	20	Manufacturing and Packaging of Reliable Bialkali Photocathodes via Sputtering	Bhandari, Harish	Radiation Monitoring Devices, MA	Accelerator	End Year 2/NCE
11:40 AM	25	<b>Coffee Break</b>				
12:05 PM	20	Long-Term Radiation Rugged Rotary Vacuum and Water Seals in Heavy-Ion Accelerators	Lalli, Jennifer	NanoSonic, Inc, VA	Instrumentation	End Year 2/IIA
12:25 PM	35	<b>NP Instrumentation in the High Luminosity Era</b>	Aschenauer, Elke	Brookhaven National Laboratory		
1:00 PM	35	<b>Lunch Break</b>				
1:35 PM	20	Development of Gen-II LAPPDTM Systems For Nuclear Physics	Foley, Michael	Incom Inc., MA	Instrumentation	End Year 2/new IIA
1:55 PM	20	Distributed digital data acquisition system with network time synchronization	Henning, Wolfgang	XIA LLC, CA	Software/Data	End Year 2/NCE
2:15 PM	20	Boron Nitride Nanotube Vibration Damping for SRF Structures	Whitney, Roy	BNNT, LLC, Newport News, VA	Accelerator	End Year 2/new PIIA
2:35 PM	20	IP Access Gateway	Radulescu, Radu	Telluric Labs, NJ	Software/Data	End Year 2/NCE
2:55 PM	20	Radiation Hardened Infrared Focal Plane Arrays	Chang, Yong	Epir, Inc., IL	Instrumentation	End of Year 2
3:15 PM	25	<b>Coffee Break</b>				
3:40 PM	20	12-bit 32 Channel 500MSps Low Latency ADC	Karnitski, Anton	Pacific Microchip Corp., CA	Electronics	End Year 2/NCE
4:00 PM	20	Radiation Hard High Speed Camera System for Accelerator Beam Diagnostics	Mikkola, Esko	Alphacore Inc, AZ	Instrumentation	End Year 1/PH IIC
4:20 PM	20	Resonant Polarimetry and Magnetometry.	Roberts, Brock	Electrodynamic, Albuquerque, NM	Accelerator	End Year 2/NCE
4:40 PM	20	High power fiber laser system for polarization of 3He gas	Lu, Wei	Raytum Photonics LLC, VA	Instrumentation	End Year 2/NCE BES col
5:00 PM	20	Automated Preparation Of 211AT For Targeted Alpha Therapy Applications	Marshall, Graham	Global FIA, Inc., WA	Isotope	End Year 2/NCE
5:20 PM	20	Supercritical Fluid Separation and Purification of Rare Earth Elements, particularly Lanthanides including 177-Lu, to Lower Energy Consumption, Reduce Processing Time and Reduce Wastes	Sinclair, Laura	CF Technologies, MA	Isotope	End Year 1
5:40 PM	0	<b>Adjourn</b>				

## DOE-NP SBIR/STTR Exchange Meeting

### Meeting Agenda-Day 2

Time(EDT)	Dur. (min)	Grant Title	Speaker	Organization	NP SBIR/ STTR Topic	Grant Status
<b>Wednesday, August 18, 2021</b>						
10:00 AM	20	HOM Absorber Design for eRHIC ERL Cavity	Schultheiss, Tom	TJS Technologies, NY	Accelerator	End Year 2/New IIA
10:20 AM	20	Scintillating Bolometer Crystal Growth and Purification for Neutrinoless Double Beta Decay Experiments	Tower, Joshua	Radiation Monitoring Devices, Inc., MA	Instrumentation	End Year 2 IIA
10:40 AM	20	High Performance FPGA-based Embedded System for Decision Making in Scientific Environments	Yu, Dantong	Sunrise Technology, Inc	Software/Data	End Year/ASCR cofund
11:00 AM	25	Coffee Break				
11:25 AM	35	NP Accelerator Needs at the Dawn of the EIC Era	Seryi, Andrei	Thomas Jefferson National Accelerator Facility		
12:00 PM	35	Lunch Break				
12:35 PM	20	A Multi-channel Radiation-tolerant, Low power, High-speed, and Resolution Analog-to-Digital Converter for Nuclear Physics Detectors	Gui, Ping	TallannQuest LLC DBA Apogee Semiconductor, TX	Electronics	End Year 2
12:55 PM	20	An RF beam Sweeper for Purifying In-Flight Produced Rare Isotope Beams	Smirnov, Alexander	Radiabeam Technologies, LLC., CA	Accelerator	End Year 1
1:15 PM	20	Ultrafast High Voltage Kicker System Hardware for Ion Clearing Gaps	Smirnov, Alexander	Radiabeam Technologies, LLC., CA	Accelerator	End Year 1
1:35 PM	20	High Performance Scintillator and Beam Monitoring System	Friedman, Peter	Integrated Sensors, LLC, OH	Instrumentation	End Year 1
1:55 PM	20	Design and fabrication of the "AODS": All-in-One Digitizer System-on-Chip	Mostafanezhad, Isar	Nalu Scientific, LLC, HI	Electronics	End Year 1
2:15 PM	25	Coffee Break				
2:40 PM	20	Next-Generation Technology for the Extremely Efficient Storage, Distribution, and Processing of Nuclear Physics Data	Gonzalez, Juan	Accelogic, LLC, FL	Software/Data	End Year 2/NCE
3:00 PM	20	Radiation Hardened Opto-atomic Magnetometer	Choi, Jae	Hedgefog Research Inc., CA	Instrumentation	End Year 2
3:20 PM	20	Modeling Plasma Discharge Cleaning of SRF Cavities	Leddy, Jarrod	Tech-X Corporation, CO	Accelerator	End Year 2
3:40 PM	20	Low Cost Data Acquisition Synchronization for Nuclear Physics Applications	Skulski, Wojtek	SkuTek Instrumentation, NY	Electronics	End Year 2
4:00 PM	20	Low RF loss DC conductive Ceramic for High Power Input Coupler Windows for SRF Cavities	Freemire, Ben	Euclid Techlabs, LLC, OH	Accelerator	End Year 1/Ph IIA
4:20 PM	0	Adjourn				

## DOE-NP SBIR/STTR Exchange Meeting

## Meeting Agenda-Day 3

Time(EDT)	Dur. (min)	Grant Title	Speaker	Organization	NP SBIR/ STTR Topic	Grant Status
<b>Thursday, August 19, 2021</b>						
10:00 AM	20	TTDAQ: A CONTINUOUS FLOW, TIMING AND TRIGGER DAQ SYSTEM	Radulescu, Radu	Telluric Labs LLC, NJ	Electronics	End Year 1
10:20 AM	20	Additively Manufactured Z-Channel Detectors for Heavy Ion Accelerator Diagnostics	Moore, Jerome	Robot Nose Corporation, IL	Accelerator	End Year 1
10:40 AM	20	Cold Spray Technology Applications for SRF Cavity Thermal and Mechanical Stabilization.	Kanareykin, Alex	Euclid Techlabs, LLC, OH	Accelerator	End Year 1
11:00 AM	20	Dynamic friction in magnetized electron coolers for relativistic beams	Bruhweiler, David	RadiaSoft LLC	Accelerator	End Year 1
11:20 AM	25	<b>Coffee Break</b>				
11:45 AM	20	Highly Transparent Aerogel with Refractive Index < 1.01 for High Energy Particle Detection	Horn, Tanja	Scintilex, LLC, VA	Instrumentation	End Year 1
12:05 PM	35	<b>Microelectronics for Nuclear Physics Instrumentation</b>	<b>Carini, Gabriella</b>	<b>Brookhaven National Laboratory</b>		
12:40 PM	20	A novel injection-locked amplitude-modulated magnetron at 1497 MHz	Neubauer, Michael	Muons, Inc., IL	Accelerator	End Year 2/NCE
1:00 PM	35	<b>Lunch Break</b>				
1:35 PM	20	An ASIC with a Low Power Multichannel ADC for Energy and Timing Measurements	Karnitski, Anton	Pacific Microchip Corporation, CA	Electronics	End Year 2
1:55 PM	20	Precise and ultra-stable laser polarization control for polarized electron beam generation	Hu, Yimin	Raytum Photonics, VA	Accelerator	End Year 2
2:15 PM	20	Low-cost and Efficient Cooling of on-Detector Electronics Using Conformal Thermoelectric Modules	Joshi, Giri	Nanohmics, Inc., TX	Electronics	End Year 1
2:35 PM	20	A browser based toolkit for improved particle accelerator controls	Edelen, Jonathan	RadiaSoft LLC, CO	Accelerator	End Year 1
2:55 PM	35	<b>Update on the Department of Energy SBIR/STTR Program, Q/A</b>	<b>Oliver, Manny</b>	<b>DOE, SBIR/STTR Office</b>		
3:30 PM	0	<b>Adjourn</b>				