

DOE-NP SBIR/STTR Exchange Meeting

August 23-25, 2022

via Zoom

Meeting Agenda-Day 1

Time (EDT)	Dur. (min)		Speaker	Organization	NP SBIR/ STTR Topic	Grant Status
Tuesday, August 23, 2022						
10:00 AM	0:01	Welcome and Introductory Remarks	Hallman, Timothy	DOE, Office of Nuclear Physics		
10:01 AM	0:04	Welcome and Introductory Remarks	Farkhondeh, Manouchehr	DOE, Office of Nuclear Physics		
10:05 AM	0:35	NP SBIR/STTR Program Overview	Shinn, Michelle	DOE, Office of Nuclear Physics		
10:40 AM	0:20	Radiation Hardened Infrared Focal Plane Arrays	Chang, Yong	Epir, Inc., IL	Instrumentation	End of Year 1/IIA
11:00 AM	0:20	Boron Nitride Nanotube Vibration Damping for SRF Structures	Whitney, Roy	BNNT, LLC, Newport News, VA	Accelerator	End Year 2/new PIIA
11:20 AM	0:20	CMOS Integrated With Float Zone Pixel Sensor	Patti, Robert	NHanced Semiconductors, Inc., IL	Electronics	End Year 1
11:40 AM	0:25	Coffee Break				
12:05 PM	0:20	Fast Multi-Harmonic Kickers	Roberts, Brock	Electrodynamic, NM	Accelerator	End Year 1
12:25 PM	0:20	Large Area Multi-Anode MCP-PMT for High Rate Applications	Foley, Michael	Incom Inc., MA	Instrumentation	End Year 1
12:45 PM	0:35	Lunch Break				
1:20 PM	0:20	Digital Data Acquisition with High Resolution and Linearity	Skulski, Wojtek	SkuTek Instrumentation, NY	Electronics	End Year 1
1:40 PM	0:20	High-Quality Conductive Bellows Coatings Using Conformal Ionized PVD To Replace Unreliable Electroplating Processes	Houlahan, Thomas	Starfire Industries LLC, Champaign, IL	Accelerator	End Year 1
2:00 PM	0:20	A New Approach to Achieving High Granularity in Low-Gain Avalanche Detectors	Islam, Rafiqul	Cactus Materials, Tempe, AZ	Electronics	End Year 1
2:20 PM	0:20	Energy Recovery Linac Designs and Studies for Electron Cooling of Hadron Beams	Gulliford, Colwyn	Xelera Research LLC, Ithaca, NY	Accelerator	End Year 1
2:40 PM	0:20	Large Volume Ring-Contact HPGe Detectors (RCD) for Low-Background	Hull, Ethan	PHDS Co., Knoxville, TN	Instrumentation	End Year 1
3:00 PM	0:20	DOE SBIR/STTR Diversity, Equity, and Inclusion Activities	Chant, Eileen	DOE, SBIR/STTR Office		
3:20 PM	0:25	Coffee Break				
3:45 PM	0:20	High Performance Glass Scintillators for Nuclear Physics Experiments	Horn, Tanja	Scintilex, LLC, Alexandria, VA	Instrumentation	End Year 1
4:05 PM	0:20	High Performance FPGA-based Embedded System for Decision Making in Scientific Environments	Sun, Yu	Sunrise Technology, Inc, NY	Software	End Year 2/ASCR cofun
4:25 PM	0:20	An ASIC with a Low Power Multichannel ADC for Energy and Timing Measurements	Karnitski, Anton	Pacific Microchip Corporation, Culver City, CA	Electronics	New Ph IIB
4:45 PM	0:20	Radiation Hardened Opto-atomic Magnetometer	Hull, Chris	Hedgefog Research Inc., CA	Instrumentation	New Ph IIA
5:05 PM	0:20	Design and Fabrication of the HDSoc- High Density Digitizer System-on-Chip	Macchiarulo, Luca	Nalu Scientific, LLC, Honolulu, HI	Electronics	Year 1
5:25 PM	0	Adjourn				

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Meeting Agenda-Day 2

Time(EDT)	Dur. (min)	Grant Title	Speaker	Organization	NP SBIR/ STTR Topic	Grant Status
Wednesday, August 24, 2022						
10:00 AM	0:20	HOM Absorber Design for eRHIC ERL Cavity	Schultheiss, Tom	TJS Technologies, NY	Accelerator	End Year 1 Phase IIA
10:20 AM	0:20	Highly Transparent Aerogel with Refractive Index < 1.01 for High Energy Particle Detection	Horn, Tanja	Scintilex, LLC, Alexandria, VA	Instrumentation	End Year 2
10:40 AM	0:20	Low-cost and Efficient Cooling of on-Detector Electronics Using Conformal Thermoelectric Modules	Joshi, Giri	Nanohmics, Inc., Austin, TX	Electronics	End Year 2/NCE
11:00 AM	0:25	Coffee Break				
11:25 AM	0:20	Low RF loss DC conductive Ceramic for High Power Input Coupler Windows for SRF Cavities	Freemire, Ben	Euclid Techlabs, LLC, OH	Accelerator	End Year 2/Ph IIA
11:45 AM	0:20	Cold Spray Technology Applications for SRF Cavity Thermal and Mechanical Stabilization.	Kostin, Roman	Euclid Techlabs, LLC, Solon, OH	Accelerator	End Year 2/NCE
12:05 PM	0:35	Lunch Break				
12:40 PM	0:20	Radiation Hard High Speed Camera System for Accelerator Beam Diagnostics	Mikkola, Esko	Alphacore Inc, Tempe, AZ	Instrumentation	End Year 2/IIC
1:00 PM	0:20	TTDAQ: A CONTINUOUS FLOW, TIMING AND TRIGGER DAQ SYSTEM	Radulescu, Radu	Telluric Labs, Red Bank, NJ	Software	End Year 2
1:20 PM	0:20	A browser based toolkit for improved particle accelerator controls	Edelen, Jonathan	RadiaSoft LLC, Boulder, CO	Accelerator	End Year 2
1:40 PM	0:20	High Performance Scintillator and Beam Monitoring System	Friedman, Peter	Integrated Sensors, LLC, OH	Instrumentation	End Year 2
2:00 PM	0:20	Design and fabrication of the "AODS": All-in-One Digitizer System-on-Chip	Mostafanezhad, Isar	Nalu Scientific, LLC, HI	Electronics	End Year 2
2:20 PM	0:25	Coffee Break				
2:45 PM	0:20	Supercritical Fluid Separation and Purification of Rare Earth Elements, particularly Lanthanides including 177-Lu, to Lower Energy Consumption,	Moses, John	CF Technologies, Inc., Hyde Park, MA	Isotopes	End Year 2/NCE
3:05 PM	0:20	Long-Term Radiation Rugged Rotary Vacuum and Water Seals in Heavy-Ion	Lalli, Jennifer	NanoSonic, Inc., Pembroke, VA	Accelerator	End Year 2
3:25 PM	0:20	Low Cost Data Acquisition Synchronization for Nuclear Physics Applications	Skulski, Wojtek	SkuTek Instrumentation, NY	Electronics	End Year 2
3:45 PM	0:20	Automated Preparation Of 211At For Targeted Alpha Therapy Applications	Marshall, Graham	Global FIA, Inc., Fox Island, WA	Isotopes	End Year 2/Ph IIA
4:05 PM	0	Adjourn				

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Meeting Agenda-Day 3

Time(EDT)	Dur. (min)	Grant Title	Speaker	Organization	NP SBIR/ STTR Topic	Grant Status
Thursday, August 25, 2022						
10:00 AM	0:20	Precise and ultra-stable laser polarization control for polarized electron-beam generation	Lu, Wei	Raytum Photonics, VA	Accelerator	End Year 2
10:20 AM	0:20	Modeling Plasma Discharge Cleaning of SRF Cavities	Leddy, Jarrod	Tech-X Corporation, Boulder, CO	Accelerator	End Year 3
10:40 AM	0:20	IP Access Gateway	Radulescu, Radu	Telluric Labs LLC, Red Bank, NJ	Software	End Year 4/NCE
11:00 AM	0:20	Coffee Break				
11:20 AM	0:20	Scintillating Bolometer Crystal Growth and Purification for Neutrinoless Double Beta Decay Experiments	Tower, Joshua	Radiation Monitoring Devices, Inc., MA	Instrumentation	End Year 3/IIA
11:40 AM	0:20	Low Cost, High-Density Digital Electronics for Nuclear Physics	Skulski, Wojtek	SkuTek Instrumentation, NY	Instrumentation	End Year 3/IIB
12:00 PM	0:35	Lunch Break				
12:35 PM	0:20	A novel injection-locked amplitude-modulated magnetron at 1497 MHz	Neubauer, Michael	Muons, Inc., IL	Accelerator	End Year 4/NCE
12:55 PM	0:20	Distributed digital data acquisition system with network time synchronization	Hennig, Wolfgang	XIA LLC, CA	Software/Data	End Year 4/NCE
1:15 PM	0:20	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/NCE
1:35 PM	0:20	Ultrafast High Voltage Kicker System Hardware for Ion Clearing Gaps	Smirnov, Alexander	RadiaBeam Systems, CA	Accelerator	End Year 2
1:55 PM	0:20	Novel methods for in-situ high-density surface cleaning (scrubbing) of ultrahigh vacuum long (100m or longer) narrow tubes to reduce secondary electron yield and outgassing	Herschovitsch, Ady	Poole Ventura, Inc., Oxnard, CA & Brookhaven National Lab	Accelerator	Year 2
2:15 PM	0:20	An RF beam Sweeper for Purifying In-Flight Produced Rare Isotope Beams	Smirnov, Alexander	RadiaBeam Systems, Santa Monica, CA	Accelerator	End Year 2/new IIA
2:35 PM	0:35	Update on the Department of Energy SBIR/STTR Program, Q/A	Oliver, Manny	DOE, SBIR/STTR Office		
3:10 PM	0	Adjourn				