DOE-NP SBIR/STTR Exchange Meeting October 24-25, 2011 Hilton Washington DC North/Gaithersburg - Montgomery Ballroom Monday, October 24, 2011 Dur. Presentation Title Speaker Organization NP SBIR/STTR Topic Time 8:30 AM Welcome and Introductory Remarks Tim Hallman/Jehanne Gillo DOE, Office of Nuclear Physics 8:40 AM NP SBIR/STTR Program Overview Manouchehr Farkhondeh DOE, Office of Nuclear Physics The development of an Inexpensive Compact Neutron Generator for 9:10 AM 20 Melvin Arthur Piestrup Adelphi Technology, Inc. Instrum/Detectors Gamma Calibration and Other Applications 9:30 AM Cryogenic CMOS Avalanche Diodes for Nuclear Physics Research Erik Johnson Radiation Monitoring Devices, Inc. Instrum/Detectors 9:50 AM Computational Models of Germanium Point Contact Detectors Paul J. Mullowney Tech-X Corporation Instrum/Detectors 10:10 AM Fast, Low Noise Photodetectors for Nuclear Physics Radiation Monitoring Devices, Inc. Instrum/Detectors Kanai Shah/Mickel McClish 35 10:30 AM Coffee Break 11:05 AM 30 RHIC Facility and the SBIR/STTR Program Wolfram Fischer **Brookhaven National Laboratory** NP User Facilities I (RHIC) 11:35 AM Multi-Cavity Proton Cyclotron Accelerator Jay Hirshfield/Michael LaPointe Omerga-P, Inc. Accelerator Technology The Orbiter Project Service Oriented Architecture Web service 20 Software/Data Managmnt 11:55 AM Mark L. Green **Tech-X Corporation** Components and Applications Development of 500 MHz Multi-Channel Readout Electronics for Fast Wolfgang Hennig/ 12:15 PM 20 Xia, LLC Electronics **Radiation Detectors** Konstantin Sabourov 12:35 PM 65 **Lunch Break** CMOS Solid-State Photomultipliers for High Energy Resoulution 1:40 PM 20 Erik Johnson Radiation Monitoring Devices, Inc. Electronics Calorimeters Energetic Condensation Growth of Thin Films for Future SRF Accelerator 2:00 PM 20 Mahadevan Krishnan Alameda Applied Sciences Corp. Accelerator Technology 2:20 PM 20 Integrated Multiple Effects Software for Nuclear Physics Applications David N. Smithe **Tech-X Corporation** Accelerator Technology Development of SRF Multi-Spoke Cavities for Electron Linacs 2:40 PM 20 Terry Grimm Niowave. Inc. Accelerator Technology 3:00 PM 35 **Coffee Break** 3:35 PM TJNAF facility and the SBIR/STTR Program Charlie Reece Thomas Jefferson Nat. Acceler. Facility NP User Facilities II (TJNAF) Designing a Coherent Electron Colling System for High-Energy Hadron 20 4:05 PM David L. Bruhwiler Tech-x Corporation Accelerator Technology Colliders 4:25 PM New Detector for Gamma Ray and Neutron Studies Instrum/Detectors Kanai Shah/Mickel McClish Radiation Monitoring Devices, Inc. 4:45 PM Magnetometer for the Neutron Electric Dipole Moment Experiment Instrum/Detectors David Christian Hovde Southwest Sciences, Inc. 5:05 PM Adjourn

DOE-NP SBIR/STTR Exchange Meeting October 24-25, 2011 Hilton Washington DC North/Gaithersburg - Montgomery Ballroom											
						Tuesday, Octob	er 25, 20	11	T		
Time	Dur.	Presentation Title	Speaker	Organization	NP SBIR/STTR Topic						
8:30 AM	20	Compact and Efficient Cold and Thermal Neutron Collimators	W. Bruce Feller	NOVA Scientific, Inc.	Instrum/Detectors						
8:50 AM	20	Advanced SQUID Sensors and Readout Electronics in Support of the nEDM Experiment and Commerical Applications	Robin Harold Cantor	Star Cryoelectronics, Llc	Instrum/Detectors						
9:10 AM	20	Charged Fluid Centrifuge Separators	Alfred Y. Wong	Nonlinear Ion Dynamics, LLC	Instrum/Detectors						
9:30 AM	35	Coffee Break									
10:05 AM	30	NP Isotope Program and Facilities and the SBIR Program	Robert Atcher	National Isotope Development Center	NP Isotope Facilities						
10:35 AM	20	High-Purity Germanium Crystals for Low Background Counting Arrays	Ethan Hull	PHDs Co.	Instrum/Detectors						
10:55 AM	20	An Approach to Chemical Free Surface Processing for High Gradient Superconducting RF Cavities	Frederick Mako	FM Technologies, Inc.	Accelerator Technology						
11:15 AM	20	Phase and Frequency Locked Magnetrons for SRF Sources	Michael Neubauer	Muons, Inc.	Accelerator Technology						
11:35 AM	20	Status of the 8 kW Power Amplitier for CEBAF	Nikolai Barov	FAR-TECH, Inc.	Accelerator Technology						
11:55 AM	65	Lunch Break									
1:00 PM	20	Development of a Tunable 28 MHz Superconducting RF Cavity for RHIC	Terry L. Grimm	Niowave, Inc.	Accelerator Technology						
1:20 PM	20	High-Fidelity Modulator Simulations of Coherent Electron Cooling Systems	David L. Bruhwiler	Tech-x Corporation	Accelerator Technology						
1:40 PM	20	Charged Particle Induced damage and Recovery of Photocathodes Employed as Nuclear Physics Injector Sources	Gregory Mulhollan	Saxet Surface Science	Accelerator Technology						
2:00 PM	35	Coffee Break									
2:35 PM	35	NP Low Energy Facilities and the SBIR/STTR Program	David Radford	Oak Ridge National Laboratory	NP User Facilities III (Low En)						
3:10 PM	20	Fast Data Acquisition Electronics: TDCs, ADCs and FPGAs	Lloyd W. Bridges	Blue Sky Electronics, LLC	Electronics						
3:30 PM	20	Segmented Rectifying and Blocking Contacts on Germanium Planar Detectors	Ethan Hull	PHDs Co.	Instrum/Detectors						
3:50 PM	20	Graphene Stripper Foil	Igor Pavlovsky	Applied Nanotech, Inc.	Instrum/Detectors						
4:10 PM	15	Closing Remarks									