

Virtual Workshop

Solution Access

Dr. Brett Pokines

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Information and registration:

<https://community.af.mil/wg/afosr/w/researchareas/25647/2020-agile-science-of-test-and-evaluation/>

Review Procedure:

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1. Zoom gov't (our method of meeting virtually) is Public Release, Distribution A only. Zoom information will be sent to you after registering for the meeting. You will be able to share your slides or have me present them.
2. Presentation slides should be sent to <brett.pokines.1@us.af.mil>, please send by 18 September 2020; Please include your name within file name. Presentation of 20 minutes with 10 minutes for questions is the ideal.
3. Please, if you are presenting AFOSR funded science; within your briefing provide: a tweet for the T&E twitter site, list of awards received related to AFOSR support, AFOSR funded publications, AFOSR workforce development accomplishments (# of undergraduate/ graduate researchers supported, # of team members hired by the DoD, other measures), other items you believe highlight your success.
4. If you are presenting AFOSR funded science; highlight how you are contributing to basic or fundamental test science within your presentation. Highlight all connections & links to the Department of Defense Test Community.
5. Please if you are AFOSR funded plan to attend the full meeting --- it is important to contribute questions and to the discussion during all three days.

Tuesday, 22 September 2020

Time	Time Zone		Name	Representing	Topic
09:00-09:15	Eastern		Dr. Brett Pokines	AFOSR	Agile Science for Test and Evaluation
09:15-09:30	Eastern		Dr. Elisabetta L. Jerome, Technical Advisor for Armament and Weapons Test and Evaluation	AFTC	Air Force Test Center
09:30-10:00	Eastern		AF TEP	TEP	USAF Test Programs
10:00-10:30	Eastern		Dr. Laura Humphrey	Aerospace Systems Directorate	V&V of Autonomy Algorithms
10:30-11:00	Eastern		Dr. Ricardo Sanfelice	UNIVERSITY OF CALIFORNIA SANTA CRUZ	Verification and Validation of Autonomous Systems with Hybrid Dynamics
11:00-11:05	Eastern		Break		
11:05-11:35	Eastern		Drs. Richard Murray/Aaron Ames	CALIFORNIA INSTITUTE OF TECHNOLOGY	Formal Methods for V&V and T&E of Autonomous Systems
11:35-12:05	Eastern		Drs. Parasara Sridhar Duggirala/Stanley Bak	UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL	Enhanced Testing of Autonomous Systems using Formal Methods
12:05-12:45	Eastern		Lunch		
12:45-13:15	Eastern		Dr. Choon Tan	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	Physics and Management of Aerothermal-Mechanical Interactions for Enabling
13:15-13:45	Eastern		Dr. Stavros Georgakopoulos	FLORIDA INTERNATIONAL UNIVERSITY	Highly Efficient Wireless Power Transfer and Data Transmission Methods
13:45-13:50	Eastern		Break		
13:50-14:10	Eastern		Major Jared Evans	AFWERX	STTR/SBIR Program
14:10-14:15	Eastern		Break		
14:15-14:30	Eastern		Dr. Brett Pokines	AFOSR	Solution Access
14:30-14:45	Eastern		Dr Kubilay Sertel	Teraprobos	Teraprobos
14:45-15:00	Eastern		Dr. Hua-Mei Chan	Intelligent Fusion	Intelligent Fusion
15:00-15:15	Eastern		Dr. Hang Ruan	Nanosonic	Nanosonic
15:15-15:30	Eastern		Dr. Chris Ostoich	ATA	ATA
15:30-15:45	Eastern		Dr. Dennis Prather	Phase Sensitive	Phase Sensitive
15:45-16:00	Eastern		Dr. James Szabo	Busek	Busek

Wednesday, 23 September 2020

Time	Time Zone		Name	Representing	Topic
09:30-10:00	Eastern		Dr. Kenneth Yu	University of Maryland	Hypersonic Center of Testing Excellence for Fostering Future Test & Evaluation Workforce
10:00-10:30	Eastern		Dr. Ronald Hanson	LELAND STANFORD JUNIOR UNIVERSITY	Fundamental Aspects of NO IR Spectroscopy in High T and P Air
10:30-11:00	Eastern		Dr. Demoz Gebre-Egziabher	UNIVERSITY OF MINNESOTA	HyCUBE: A Reconfigurable CubeSat-Like Platform for Hypersonic Flight Testing
11:00-11:05	Eastern		Break		
11:05-11:35	Eastern		Dr. Adel Alaeddini	University of Texas at San Antonio	An Active Learning Methodology for Design and Optimization of Complex Expensive Tests
11:35-12:05	Eastern		Dr. Vinod Kumar	UNIVERSITY OF TEXAS AT EL PASO	Need for CFD Modeling of Water Braking Phenomena at the Holloman High Speed Test Track
12:05-12:45	Eastern		Lunch		
12:45-13:15	Eastern		Dr. Donald Kunz	US DEPT OF AIR FORCE	Basic Research with Integrated Flight Test
13:15-13:45	Eastern		Dr. Paul Sotirelis	SENSORS DIRECTORATE	Exploring Fusion and Autonomous Applications of Radar Polarimetry
13:45-14:15	Eastern		Dr. Riccardo Bevilacqua	UNIVERSITY OF FLORIDA	Machine learning based transfer to predict warhead in-flight behavior from static arena test data
14:15-14:45	Eastern		Dr. Alvaro Velasquez	INFORMATION DIRECTORATE	Verifiable Reinforcement Learning with Testing for Assured Autonomy
14:45-15:15	Eastern		Dr. Sukwon Choi	PENNSYLVANIA STATE UNIVERSITY	Thermal Mechanical Investigation of Ultra Wide Bandgap Materials and Devices
15:15-15:30	Eastern		Break		
15:30-16:00	Eastern		Dr. Mike Holmes	Aerospace Systems Directorate	Electric Propulsion Test and Evaluation Methodologies for Plasma in the Environments of Space and Testing
16:00-16:30	Eastern		Dr. Eric Heller	MATERIALS AND MANUFACTURING DIRECTORATE	Tools for Assessing Emerging High-Power Solid State Electronics

Thursday, 24 September 2020

Time	Time Zone		Name	Representing	Topic
09:00-09:30	Eastern		Vice Admiral(R) Sahapong Kruapech	Former MRDC, Thailand	Military Research and Development Center History
09:30-10:00	Eastern		Dr. Jeroen van Kan	NATIONAL UNIVERSITY OF SINGAPORE	Evaluating high resolution in vivo proton imaging at nanoscale aiming to set up liquid cell proton microscopy
10:00-10:30	Eastern		Dr. Austin Minnich	CALIFORNIA INSTITUTE OF TECHNOLOGY	Towards the quantum noise limit in microwave amplifiers: a first- principles study of hot electron noise
10:30-11:00	Eastern		Dr. Katayun Barmak	COLUMBIA UNIVERSITY	Thermoelectric Phenomena in Quasi- One-Dimensional Metals
11:00-11:05	Eastern		Break		
11:05-11:35	Eastern		Dr. Alexander Sergienko	BOSTON UNIVERSITY	Efficient Quantum Frequency Conversion for Quantum Communication and Quantum Information Processing
11:35-12:05	Eastern		Dr. John Schaibley	UNIVERSITY OF ARIZONA	Towards single photon transistors with 1D and 2D materials
12:05-12:45	Eastern		Lunch		
12:45-13:15	Eastern		Dr. Paras Prasad	RESEARCH FOUNDATION OF STATE UNIVERSITY OF NEW YORK	Design, Fabrication, and Testing of Revolutionary New Generation Hybrid 2-D Magneto-Optic Materials
13:15-13:45	Eastern		Dr. Marko Loncar	HARVARD COLLEGE	High-Performance Electro-Optic Frequency Combs for High-Precision Measurements
13:45-14:15	Eastern		Dr. Jeffery Allen	MUNITIONS DIRECTORATE	Hardware Assurance Research for Verification Enabling Security Test and Evaluation for Cybersecurity
14:15-14:45	Eastern		Dr. Steven Schneider	PURDUE UNIVERSITY	Towards Experimental Measurements of Boundary-Layer Transition at the Holloman Test Track
14:45-15:00	Eastern		Break		
15:00-15:30	Eastern		Dr. Venkateswaran Sankaran	Aerospace Systems Directorate	Algorithmic Advancements for Turbulent Combustion Simulations of Aerospace Propulsion Applications
15:30-16:00	Eastern		Dr. Helen Durand	WAYNE STATE UNIVERSITY	Optimization-Based Materials Design and Manufacturing
16:00-16:30	Eastern		Dr. Taylor Barton	UNIVERSITY OF COLORADO	Reconfigurable Transmitters for Test & Evaluation with Integrated Thermal Monitoring and Control
16:30-17:00	Eastern		Dr. Ryan Berke	UTAH STATE UNIVERSITY	High-Throughput Characterization of High Cycle Fatigue for Extreme Temperature