

2025 Propulsion and Power Annual Review

Dr. Justin Koo | August 4-6, 2025 | Arlington, VA -hybrid

Basic Research Innovation Collaboration Center (BRICC)
4100 N Fairfax Drive | Suite 450 | Arlington, VA 22203

Agenda Day 1 | August 4, 2025

Time	Topic	Speaker
845-900	Sign in/Login	
900-925	Opening Remarks	Justin Koo AFOSR
915-945		Yevgeny Raitses Princeton
945-1030	Fundamental Emission Dynamics and Diagnostic of Porous Media Electrospray Emitters / Development of and Initial Results from a Test Cell for Diagnostics of Molecular Gasses within an RF Plasma	Kristina Lemmer Western Michigan
1030-1045	BREAK	
1045-1115		Richard Wirz Oregon State
1115-1145		Ann Karagozian UCLA
1145-1315	LUNCH	
1315-1345	Rocket Engine Large-eddy Simulations with Advanced Modeling of Multi-injectors and Flamelets	William Sirignano UC-Irvine
1345-1415	Absorption and Emission Spectroscopy Diagnostics for Metal Combustion in Propellant Flames	Christopher Goldenstein Purdue
1415-1430		Peter Vorobieff UNM
1430-1445	BREAK	
1445-1515	Limit Behavior of Wavy Supersonic Flows: A Preliminary Combined CFD and Experimental Study with Application to Bladeless Turbines	James Braun NCSU
1515-1545		Stephen Cronin USC
1545-1615	Quadrature-based moment methods for low-temperature plasmas	Pierre-Yves Taunay US Naval Academy
1615-1645		Matt Harvazinski AFRL/RQRC
	REVIEW ADJOURN (1645)	

Agenda Day 2 August 5, 2025		
Time	Topic	Speaker
845-900	Sign in/Login	
900-930		Joseph Oefelein Georgia Tech
930-1000		Lisa Poulikakos UC-San Diego
1000-1030		Jodie Lutkenhaus Texas A&M
1030-1045	BREAK	
1045-1115	Solid-state batteries and low-temperature batteries for aerospace applications	Yuan Yang Columbia
1115-1145	Fundamental Research on the Pure Ion and Droplet Emission Modes of Electrospray Thrusters	Manuel Gamero-Castano UC-Irvine
1145-1315	LUNCH	
1315-1345		Juan De La Mora Yale
1345-1415		Daoru "Frank" Han Missouri S&T
1415-1445		Elaine Petro Cornell
1445-1500	BREAK	
1500-1530		Benjamin Prince AFRL/RV
1530-1600		Artur Davoyan UCLA
1600-1630		Kentaro Hara Stanford
	REVIEW ADJOURN (1630)	

Agenda Day 3 | August 6, 2025

Time	Topic	Speaker
845-0900	Sign in/Login	
900-930	Exploring multi-modality in electric propulsion	Michael Keidar George Washington
930-1000	A study of plasma dynamics of microwave plasma sources for electric propulsion applications	Stephen Parsons Riverside Research
1000-1030		David Bilyeu AFRL/RQRD
1030-1045	BREAK	
1045-1115		Justin Little Washington
1115-1145		Thomas Underwood UT-Austin
1145-1330	LUNCH	
1330-1400		Benjamin Jorns Michigan
1400-1430		Azer Yalin Colorado State
1430-1500		Deborah Levin Illinois
1500-1515	BREAK	
1515-1530	A state-to-state kinetic model for pulsed RF excited molecular gas plasmas	Laxminarayan Raja UT-Austin
1530-1545		John "Jack" Brooks Naval Research Laboratory
1545-1615	Propellant Ambiguity for Radio-Frequency Plasma Micro-Propulsion (AMBI-RF)	Scott Doyle University of Aberdeen
1615-1645		Carl Hartsfield AFIT
	REVIEW ADJOURN (1645)	