

**AFRL**

2022 AFOSR Spring Review

April 19-29, 2022 | Arlington, VA -hybrid

Basic Research Innovation Collaboration Center (BRICC)
4100 North Fairfax Drive, Suite 400 Arlington, VA 22203

Agenda Day 1 | Tuesday, April 19, 2022

Dress Policy: Business (Civilian) / Service Dress (Military)

Time	Topic	Speaker
0700 / 0745	ZOOM Government Login / In-person Check-in	
AFOSR and Science and Engineering (RT) Organizational Leadership and Initiatives		
0800	Welcome/Introduction of Maj Gen Pringle	Dr. William (Pat) Roach, ST, Chief Scientist
0805	Opening Remarks	Maj Gen Heather Pringle, AFRL CC
0815	Director's Remarks/Intro of Dr. Naik	Dr. Shery Welsh, SES, AFOSR Director
0825	Introduction of SME Panelists	Dr. Rajesh Naik, SME Panel Chair
0830	AFOSR Chief Scientist's Overview	Dr. William (Pat) Roach, ST, Chief Scientist
0900	Deputy Chief Scientist Remarks & Intramural Programs	Dr. Leslie Blaha, Deputy Chief Scientist
0930	Science Analytics Initiatives	Dr. Enrique (Riq) Parra, Chief Analytics Officer
1000	BREAK	
1018	RT Division Overview	Col Daniel Galton, RT Division Chief
1055	RT Tech Advisor Remarks	Dr. Milton (Van) Blackwood, RT Tech Advisor
1115	RTA Branch Overview	Lt Col Matt Krisak, RTA Branch Chief
1135	RTB Branch Overview	Dr. John Luginsland, Acting RTB Branch Chief
1155	RTC Branch Overview	Mr. Neville Thompson, RTC Branch Chief
1215	Closing Remarks for Day	Dr. Shery Welsh, SES, AFOSR Director
1220	BREAK	
1235	SME Panel Only—Closed Door Session (Runs concurrently with AFOSR Leadership Session)	
1235	AFOSR Leadership—Closed Door Session (Runs concurrently with SME Panel Session)	
Approx 1305	Day 1 Hot Wash for Organizing Committee	
	REVIEW ADJOURNS FOR THE DAY	

Agenda Day 2 | Wednesday, April 20, 2022


Dress Policy: Presenters: Business (Civilian); Service Dress (Military)

Attendees: Business Casual (Civilian); Uniform of the Day (Military)

Time	Topic	Speaker
0700 / 0745	ZOOM Government Login / In-person Check-in	
0800	Opening Comments	Dr. Shery Welsh, SES AFOSR Director
0805	Introduction of SME Panelists	Dr. Rajesh Naik, SME Panel Chair
RTC Programs		
0810	SFFP, STEM, FOE, ASSURE, AFRL Scholars	Dr. Kimberly Jacoby Morris, RTC
0845	DURIP, MURI, DESI, GRC Bundle	Ms. Katie Wisecarver, RTC
0920	BREAK	
0935	PECASE, YIP, NDSEG, STFP	Ms. Ellen Robinson, RTC
1010	HBCU/MSI, DEPSCoR	Mr. Edward Lee, RTC
1045	SBIR, STTR	Dr. Ray Moszee, RTC
1120	USAFA, AFIT Programs	Capt Andrew Cady, RTC
1145	BREAK	
International Office (IO) Organizational Leadership		
1200	IO Division Overview	Col Timothy Russell, IO Division Chief
1235	IO Tech Advisor Remarks	Dr. Barrett Flake, IO Tech Advisor
1255	ION Branch Overview	Dr. Tom Kim, ION Branch Chief
1325	Closing Remarks for Day	Dr. Shery Welsh, SES, AFOSR Director
1330	BREAK	
1345	SME Panel Only—Closed Door Session (Runs concurrently with AFOSR Leadership Session)	
1345	AFOSR Leadership—Closed Door Session (Runs concurrently with SME Panel Session)	
Approx 1415	Day 2 Hot Wash for Organizing Committee	
	REVIEW ADJOURNS FOR THE DAY	


Agenda Day 3 | Thursday, April 21, 2022

Dress Policy: Presenters: Business (Civilian); Service Dress (Military)
Attendees: Business Casual (Civilian); Uniform of the Day (Military)

Time	Topic	Speaker
0700 / 0745	ZOOM Government Login / In-person Check-in	
0800	Opening Comments	Dr. Shery Welsh, SES, AFOSR Director
0805	Introduction of SME Panelists	Dr. Rajesh Naik, SME Panel Chair
International Office (IO) Leadership, Continued		
0810	IOE Branch Overview	Col (S) Melanie Presuto, IOE
0830	IOA and IOM Branch Overviews	Dr. Jermont Chen, IOA
0900	Diverse Set of IOM Programs	Dr. Geoff Andersen, IOM
0930	IOS Branch Overview & Mixed Portfolio	Lt Col Dan Montes, IOS Lt Col Chris Carson, IOS
1005	BREAK	
Dr. George F. Smoot Session International Office (IO)		
1020	Section Introduction	Dr. William (Pat) Roach, ST, Chief Scientist
1025	Space Science	Dr. Stacie Williams, Space Science Architect
1100	Space Science	Dr. Julie Moses, RTB
1135	BREAK	
1150	Physics of Sensing	Dr. Michael Yakes, RTB
1225	Space Domain Awareness and Space Weather	Dr. Bradford Barrett, IOS
1300	Space Science	Maj Grant Thomas, IOE
1325	Closing Remarks for Day	Dr. Shery Welsh, SES, AFOSR Director
1330	BREAK	
1345	SME Panel Only—Closed Door Session (Runs concurrently with AFOSR Leadership Session)	
1345	AFOSR Leadership—Closed Door Session (Runs concurrently with SME Panel Session)	
Approx 1415	Day 3 Hot Wash for Organizing Committee	
	REVIEW ADJOURNS FOR THE DAY	


Agenda Day 4 | Friday, April 22, 2022

Dress Policy: Presenters: Business (Civilian); Service Dress (Military)
Attendees: Business Casual (Civilian); Uniform of the Day (Military)

Time	Topic	Speaker
0700 / 0745	ZOOM Government Login / In-person Check-in	
0800	Opening Comments	Dr. Shery Welsh, SES AFOSR Director
0805	Introduction of SME Panelists	Dr. Rajesh Naik, SME Panel Chair
Dr. Sheldon Glashow, Dr. Steven Weinberg, and Dr. Abdus Salam Session		
0810	Atomic & Molecular Physics	Dr. Boyan Tabakov, RTB
0845	Plasma, Electro-energetic Physics	Dr. John Luginsland, RTB
0920	BREAK	
0935	Directed Energy	Dr. Nate Lockwood, IO
1010	Electromagnetics	Dr. Arje Nachman, RTB
1045	IOA Quantum Portfolio	Lt Col Michael Richards, IOA
1110	BREAK	
1125	Condensed Matter Physics	Dr. Jiwei Lu, RTB
1200	Aerospace Materials for Extreme Environments	Dr. Ali Sayir, RTB
1235	BREAK	
1250	Quantum Information Sciences	Dr. Grace Metcalfe, RTB
1325	Physics and Space Weather	Dr. Scott Dudley, IOE
1400	SHORT BREAK	
1410	Ultra-short Pulse Laser-Matter Interactions	Dr. Andrew Stickrath, RTB
1445	Closing Remarks for Day	Dr. Shery Welsh, SES, AFOSR Director
1450	BREAK	
1505	SME Panel Only—Closed Door Session (Runs concurrently with AFOSR Leadership Session)	
1505	AFOSR Leadership—Closed Door Session (Runs concurrently with SME Panel Session)	
Approx 1535	Day 4 Hot Wash for Organizing Committee	
	REVIEW ADJOURNS FOR THE DAY	

Agenda Day 5 | Monday, April 25, 2022



Dress Policy: Presenters: Business (Civilian); Service Dress (Military)
Attendees: Business Casual (Civilian); Uniform of the Day (Military)

Time	Topic	Speaker
0700 / 0745	ZOOM Government Login / In-person Check-in	
0800	Opening Comments	Dr. Shery Welsh, SES AFOSR Director
0805	Introduction of SME Panelists	Dr. Rajesh Naik, SME Panel Chair
Dr. Jack Kilby Session		
0810	GHz-THz Electronics	Dr. Ken Goretta, RTA
0845	Optoelectronics & Photonics	Dr. Gernot Pomrenke, RTB
0920	BREAK	
0935	Agile Science for Test and Evaluation	Dr. Brett Pokines, RTA
1010	Sensors and Microelectronics	Dr. Attila Szep, IOE
1045	BREAK	
1100	Sensors, Electromagnetics, and Device Physics	Dr. Tony Kim, IOA
1135	Dynamic Data & Information Processing	Dr. Erik Blasch, RTA
1210	BREAK	
1225	Cognitive and Computational Neuroscience	Dr. Hal Greenwald, RTA
1300	Information Science	Dr. Akira Namatame, IOA
1325	Science of Information, Computation, Learning & Fusion	Dr. Richard (Doug) Riecken, RTA
1400	BREAK	
1415	Trust and Influence	Dr. Laura Steckman, RTA
1450	Closing Remarks for Day	Dr. Shery Welsh, SES, AFOSR Director
1455	BREAK	
1510	SME Panel Only—Closed Door Session (Runs concurrently with AFOSR Leadership Session)	
1510	AFOSR Leadership—Closed Door Session (Runs concurrently with SME Panel Session)	
Approx 1540	Day 5 Hot Wash for Organizing Committee	
	REVIEW ADJOURNS FOR THE DAY	

Agenda Day 6 | Tuesday, April 26, 2022

Dress Policy: Presenters: Business (Civilian); Service Dress (Military)



Attendees: Business Casual (Civilian); Uniform of the Day (Military)


Time	Topic	Speaker
0700 / 0745	ZOOM Government Login / In-person Check-in	
0800	Opening Comments	Dr. Shery Welsh, SES AFOSR Director
0805	Introduction of SME Panelists	Dr. Rajesh Naik, SME Panel Chair
Dr. Yoichiro Nambu Session		
0810	Dynamical Systems & Control Theory	Dr. Frederick Leve, RTA
0845	Computational Mathematics	Dr. Fariba Fahroo, RTA
0920	Information Assurance & Cyber Security	Dr. Tristan Nguyen, RTA
0955	BREAK	
1010	Mathematical Optimization	Dr. Warren Adams, RTA
1045	Complex Networks	Dr. Don Wagner, RTA
1120	Ops Research and Applied Mathematics	Lt Col Mark Friend, IOE
1155	BREAK	
Dr. Ragnar Granit Session		
1210	Human Performance and Biosystems	Dr. Patrick Bradshaw, RTB
1245	Life Sciences	Dr. Nandini Iyer, IOE
1322	BREAK	
1340	Biophysics	Dr. Sofi Bin-Salamon, RTB
1415	Biophysics, Behavioral Science, Mathematics	Lt Col Kris Ahlers, IOA
1450	Closing Remarks for Day	Dr. Shery Welsh, SES, AFOSR Director
1455	BREAK	
1510	SME Panel Only—Closed Door Session (Runs concurrently with AFOSR Leadership Session)	
1510	AFOSR Leadership—Closed Door Session (Runs concurrently with SME Panel Session)	
Approx 1540	Day 6 Hot Wash for Organizing Committee	
	REVIEW ADJOURNS FOR THE DAY	

Agenda Day 7 | Wednesday, April 27, 2022

Dress Policy: Presenters: Business (Civilian); Service Dress (Military)

Attendees: Business Casual (Civilian); Uniform of the Day (Military)

Time	Topic	Speaker
0700 / 0745	ZOOM Government Login / In-person Check-in	
0800	Opening Comments	Dr. Shery Welsh, SES AFOSR Director
0805	Introduction of SME Panelists	Dr. Rajesh Naik, SME Panel Chair
Dr. Paul Flory Session		
0810	Organic Materials Chemistry	Dr. Kenneth Caster, RTB
0845	Chemistry, Materials and Biological Sciences	Dr. Stacy Manni, IOS
0920	Molecular Dynamics & Theoretical Chemistry	Dr. Michael Berman, RTB
0955	BREAK	
Dr. Ilya Prigogine Session		
1010	Energy, Combustion & Non-Equilibrium Thermodynamics	Dr. Chiping Li, RTA
1045	Aeronautical Sciences	Dr. Douglas Smith, IOE
1120	Hypersonic Modeling for Guidance, Navigation and Control	Dr. Garrison Lindholm, IOA
1145	BREAK	
1200	High-Speed Aerodynamics	Dr. Sarah Popkin, RTA
1235	Unsteady Aerodynamics & Turbulent Flows	Dr. Gregg Abate, RTA
1310	BREAK	
1325	Propulsion and Power	Dr. Mitat Birkan, RTA
1400	Aerospace Sciences	Lt Col Ryan Carr, IOA
1435	Closing Remarks for Day	Dr. Shery Welsh, SES, AFOSR Director
1440	BREAK	
1455	SME Panel Only—Closed Door Session (Runs concurrently with AFOSR Leadership Session)	
1455	AFOSR Leadership—Closed Door Session (Runs concurrently with SME Panel Session)	
Approx 1525	Day 7 Hot Wash for Organizing Committee	
	REVIEW ADJOURNS FOR THE DAY	

Agenda Day 8 Thursday, April 28, 2022		
Dress Policy: Presenters: Business (Civilian); Service Dress (Military) Attendees: Business Casual (Civilian); Uniform of the Day (Military)		
Time	Topic	Speaker
0700 / 0745	ZOOM Government Login / In-person Check-in	
0800	Opening Comments	Dr. Shery Welsh,SES, AFOSR Director
0805	Introduction of SME Panelists	Dr. Rajesh Naik, SME Panel Chair
Dr. Nicolaas Bloembergen, Dr. Arthur Schawlow, and Dr. Kai Siegbahn Session		
0810	Aerospace Composite Materials	Dr. Ming-Jen Pan, RTA
0845	Mechanics of Multifunctional Materials and Microsystems	Dr. Byung-Lip (Les) Lee, RTB
0920	BREAK	
0935	Materials Discovery and Manufacturing Science	Dr. Jeremy Knopp, IOA
1010	Materials, Chemistry and Nanoscience	Dr. Todd Rushing, IOA
1045	Digital Strategies for Aircraft Structures and Robotics	Dr. Fumio Kojima, IOA
1110	Closing Remarks for Day	Dr. Shery Welsh, SES, AFOSR Director
1115	BREAK	
1130	SME Panel Only—Closed Door Session (Runs concurrently with AFOSR Leadership Session)	
1130	AFOSR Leadership—Closed Door Session (Runs concurrently with SME Panel Session)	
Approx 1200	Day 8 Hot Wash for Organizing Committee	
	REVIEW ADJOURNS FOR THE DAY	

Agenda Day 9 Friday, April 29, 2022		
Dress Policy: Presenters: Business (Civilian); Service Dress (Military) Attendees: Business Casual (Civilian); Uniform of the Day (Military)		
Time	Topic	Speaker
0800	In-person Registration and ZOOM Government Login	
0830	Tech SME Panel Only-- Closed Door Session	
1200	SME Panel Out Brief	
REVIEW ADJOURNS		

Acronyms:

AFIT	Air Force Institute of Technology
AFOSR	Air Force Office of Scientific Research
AFRL	Air Force Research Laboratory
DARPA	Defense Advanced Research Projects Agency
DEPSCoR	Defense Established Program to Stimulate Competitive Research
DESI	Defense Enterprise Science Initiative
DURIP	Defense University Research Instrumentation Program
FOE	Frontiers of Engineering
HBCU/MSI	Historically Black Colleges and Universities / Minority Serving Institutions
GRC	Gordon Research Conference
IO	International Office
IOA	International Office, Asia
IOE	International Office, Europe
IOM	International Office, Australia
ION	International Office, North America
IOS	International Office, South America
MURI	Multidisciplinary University Research Initiative
NDSEG	National Defense Science and Engineering Graduate
PECASE	Presidential Early Career Awards for Scientists and Engineers
RT	Science and Engineering
RTA	Engineering and Complex Systems
RTB	Physical and Biological Sciences
RTC	Science and Engineering Collaboration
SAF/AQR	Secretary of the Air Force for Acquisition and Research
SBIR	Small Business Innovation Research
SES	Senior Executive Service
SFFP	Summer Faculty Fellowship Program
SME	Subject Matter Expert
ST	Senior Technologist
STEM	Science, Technology, Engineering, and Mathematics
STFP	Science and Technology Fellowship Program
STTR	Small Business Technology Transfer Program
USAFA	United States Air Force Academy
YIP	Young Investigator Research Program