

# 2018 (U.S. only) Mid-IR MURI Review (FY15 MURI Topic 13)

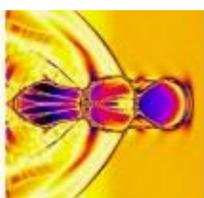
Dr. Riq Parra | April 30, 2018 | Arlington VA

Holiday Inn Arlington At Ballston,  
4610 Fairfax Dr., | Arlington/Clarendon Rooms  
Arlington, VA 22203

## Mid-IR MURI Annual Review: Strong Field Laser Matter Interactions in the Mid-IR Harnessing Strong-Field Mid-IR Lasers: Designer Beams of Relativistic Particles & X-ray Light

Time	Topic	Speaker
8:00	<b>Registration</b>	
8:30	Opening remarks	Dr. Enrique Parra AFOSR
8:40	MURI Overview and Highlights Harnessing Strong-Field Mid-Infrared (IR) Lasers	Margaret Murnane University of Colorado
<b>High Harmonic Sources Session:</b>		
9:00	Theory of Mid-IR Driven High Harmonics and Applications: Context and Future Directions	Andreas Becker University of Colorado
9:30	Quantum Control of High Harmonics: Spectral/Temporal/Polarization/OAM-Shaped Waveforms: Context and Future Directions	Margaret Murnane University of Colorado
10:00	<b>BREAK</b>	
10:30	Circularly Polarized High Order Harmonics and Attosecond Pulses with Orbital Angular Momentum	Carlos Hernandez- Garcia University of Salamanca
11:00	Noncollinear Circular Harmonics and Extreme Ultraviolet Vector Beams	Chip Durfee Colorado School of Mines
11:30	<b>LUNCH</b>	
<b>Ultrastrong Fields Session:</b>		
1:00	Particle Acceleration from Mid-IR Laser Plasmas: Context and Future Directions	Karl Krushelnick University of Michigan
1:30	Towards relativistic MIR interactions with overcritical plasmas	Franklin Dollar UC Irvine
2:00	Direct Laser Acceleration	Howard Milchberg University of Maryland
2:30	<b>BREAK</b>	
<b>Nonlinear Propagation Session:</b>		

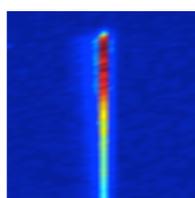
3:00	Mid-IR Nonlinear Propagation: Context and Future Directions	Alex Gaeta Columbia University
3:30	Mid-IR Nonlinear Propagation and Light-Matter Interactions	Miro Kolesik University of Arizona
<b>Mid-IR Technology Session:</b>		
4:00	Advances in Mid-IR Lasers for High Harmonics: Context and Future Directions	Henry Kapteyn University of Colorado
4:20	Mid-IR Lasers for Laser Acceleration	Howard Milchberg University of Maryland
4:30	<b>MEETING ADJOURN</b>	



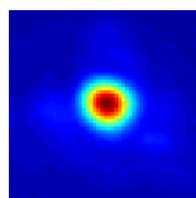
Particle acceleration



High harmonic waveforms



Nonlinear mid-IR propagation



Mid-IR lasers