### FoNLO 2018 Program

All sessions take place in the Davis Auditorium. Coffee breaks will also take place in the Davis Auditorium. Lunch will take place in Palamountain 201 (adjacent to Davis). Registration will take place in Gannet Lobby.

## Tuesday, June 19th

08:00-08:30 am	Registration and Morning Coffee	
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#### Session 1

08:35-08:45 am	Welcome to FoNLO
08:50-10:00 am	Marlan Scully, "From Black Holes to Black Mold." (Tutorial)
10:05-10:35 am	Coffee Break
10:40-11:00 am	Aleks Rebane, "Absorption of light by resonant media: From linear
	response to self-induced transparency."
11:05-11:25 am	Hans-Peter Wagner, "Z-scan measurements on thin PTCDA and Alq3
	films using tightly focused and high repetition-rate laser pulses."
11:30-12:05 pm	Panel Discussion

12:10-12:55 pm	Lunch
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#### Session 2

01:00-01:40 pm	Mark Kuzyk, "A grand tour of sum rules, size and limits." (Tutorial)
01:45-02:05 pm	Sean Mossman, "Sum rule constrained proxy state for use in truncated
	hyperpolarizability calculations."
02:10-02:30 pm	Ethan Crowell, "Using excited states and degeneracies to enhance the
	electric polarizability and first hyperpolarizability."
02:35-02:55 pm	Rick Lytel, "Designing molecular materials for nonlinear optical
	devices."
03:00-03:30 pm	Coffee Break
03:35-03:55 pm	Richard Robinett, "Exact results for infinite supersymmetric hierarchies
	of familiar 1D potentials on the half-line: Applications to quantum
	mechanical sum rules."
04:00-04:20 pm	Tim Atherton, "Shape optimization and hyperpolarizability."
04:25-05:00 pm	Panel Discussion

# Wednesday, June 20<sup>th</sup>

08:00-08:30 am	Morning Coffee
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### Session 3

08:35-09:10 am	Martti Kauranen, "Resonances and local fields in nonlinear
	metasurfaces." (Tutorial)
09:15-09:35 am	Rachel Grange, "Metal-oxide nanostructures to enhance nonlinear
	optical signal for compact photonic devices."
09:40-10:00 am	Kenneth Knappenberger, "Examining metal nanostructures using multi-
	dimensional femtosecond absorption spectroscopy."
10:05-10:35 am	Coffee Break
10:40-11:00 am	Juan Navea, "Symmetry-breaking effects on vibrational spectroscopy of
	surface nitrates."
11:05-11:25 am	Ruchira Silva, "Investigating the fate of photoexcited perovskites."
11:30-12:05 pm	Panel Discussion

12:10-12:55 pm	Lunch
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### Session 4

01:00-01:40 pm	Stephen Rand, "Magneto-electric phenomena at the molecular level."
	(Tutorial)
01:45-02:05 pm	Tuan Trinh, "Generation of rotations in small molecules with magneto-
	electric nonlinearities."
02:10-02:30 pm	Hengky Chandrahalim, "Micro-ring resonators for magneto-electric
	experimentation."
02:35-02:55 pm	Alexander Lou, "Third order and Magneto-Electric response of Twisted
	Chromophores."
03:00-03:30 pm	Coffee Break
03:35-03:55 pm	Stefano Corni, "Optical properties of molecules close to metal
	nanoparticles: simulations in the time domain."
04:00-04:20 pm	Ken Singer, "Linear and nonlinear optics in organic cavity polaritons."
04:25-05:00 pm	Panel Discussion

06:30-8:00 pm	Conference Barbecue (at the Spa, on the first Floor of the Case Center)
	Jill Linz, "Springing into the Universe."

# Thursday, June 21<sup>th</sup>

08:00-08:30 am	Morning Coffee

### Session 5

08:35-08:55 am	Elisabetta Collini, "Non Linear Optics: a new handle to quantum
	technologies."
09:00-09:20 am	Anna Painelli, "From molecules to materials: spectral properties of
	dyes and aggregates."
09:25-09:55 am	Ivan Biaggio, "From molecules to materials: in-situ poling during
	small-molecule self-assembly?"
10:05-10:35 am	Coffee Break
10:40-11:00 am	Koen Clays, "Functionalized carbon nanotubes as implementations of
	hybrid nanowires."
11:05-11:25 am	Luis Gonzalez-Urbina, "Nonlinear Optical Properties of Colloidal
	Photonic Crystals."
11:30-12:00 pm	Panel Discussion
12:05-12:15 pm	Closing Remarks