

#### Nanophotonics Out of Equilibrium

Organizers: Matthew Pelton, Alejandro Majavacas, Maxim Sukharev June 25 – 29, 2023

Telluride Intermediate School, 725 W. Colorado Ave., Telluride, CO 81435 TSRC host: Mark Kozak, 970-708-4426

Saturday, June 24	
4:30 - 7:00	All Telluride Science Meet and Greet The Liberty, 121 S. Fir St.

Sunday, June 25			
2:00 - 2:45	Maxim Sukharev	Molecular plasmonics under strong coupling driven by intense radiation	
2:45 - 3:30	Jeffrey Owrutsky	Nonequilibrium effects in vibration-cavity polaritons	
4:30 - 7:00	The Rooj	Happy Hour (sponsored) f, New Sheridan Hotel, 231 W. Colorado Ave.	



# Monday, June 26

8:30 – 9:00 AM		Continental Breakfast
9:00 - 9:45	Matthew Pelton	Room-temperature strong coupling between plasmonic nanocavities and single emitters
9:45 - 10:30	Alexey Belyanin	Quantum dynamics of many-emitter states in dissipative nanocavities
10:30 - 11:00		Coffee Break
11:00 - 11:45	Fermius Koenderink	Towards sideband-resolved molecular optomechanics – bringing high-Q to the nanocube-on-mirror system
11:45 – 12:30 PM	Antonio Fernandez- Dominguez	Quantum nanophotonics: antibunched light and molecular entanglement
12:30 – 1:30		Lunch (catered)
12:30 – 1:30 1:30 – 2:15	Garnett Bryant	Lunch (catered) Quantum plasmonics and analog quantum simulation: what you can learn about quantum plasmons and dynamics from few-body simulators
	Garnett Bryant Alejandro Manjavacas	Quantum plasmonics and analog quantum simulation: what you can learn about quantum plasmons and
1:30 - 2:15	Alejandro	Quantum plasmonics and analog quantum simulation: what you can learn about quantum plasmons and dynamics from few-body simulators Lattice resonances excited by arbitrary sources: from



# Tuesday, June 27

8:30 – 9:00 AM		Continental Breakfast
9:00 - 9:45	Wei Xiong	Molecular dynamics modified by light-matter strong coupling
9:45 - 10:30	Joel Yuan Zhou	Polariton chemistry: single-molecule vs collective phenomena
10:30 - 11:00		Coffee Break
11:00 - 11:45	Jacob Khurgin	Why are refractive indices so close for different materials and also so difficult to change?
11:45 – 12:30 PM	Hayk Haratyunyan	Ultrafast and nonlinear response of high-n metasurfaces and epsilon near zero materials
12:30 - 2:00	Lu	nch / Student Poster Session (catered)
2:00 - 6:30	Group Hike	
6:30 – 7:30	Tellur	Town Talk ide Conference Center, Mountain Village Cash bar, Doors open 6:00



an Open Access Journal by MDPI

# Wednesday, June 28

8:30 – 9:00 AM		Continental Breakfast
9:00 - 9:45	Matthew Sheldon	Optimizing and preserving exceptional photoluminescence of halide perovskite nanocrystals
9:45 - 10:30	Jennifer Hollingsworth	Intrinsic and extrinsic control of quantum optical properties in colloidal quantum dots: focus on synthesis and nanointegration
10:30 - 11:00		Coffee Break
11:00 – 11:45	Mona Tréguer- Delapierre	Controlling nanomaterial properties using organization
11:45 – 12:30 PM	Andrea Baldi	Plasmonic photothermal chemistry: nanoscale and ultrafast heating with metal nanoparticles
12:30 - 2:00		Lunch (catered)
2:00 - 5:30		Free Time
5:30 - 7:30		All-workshop Telluride Science Picnic Telluride Intermediate School, under the tent



### Thursday, June 29

8:30 – 9:00 AM	Continental Breakfast
9:00 - 10:30	Open Discussion and Planning Session