



**Program: 3rd Fatima (In-Person) Workshop**  
**22-23 February 2023**  
**University Guest House, Granite Ballroom South, University of Utah**

Zoom Link

<https://utah.zoom.us/j/95078751140>

Passcode: fatimaUU

**Wednesday 22 February 2023**

Chair: Sebastian Hoch	
8.30 - 8.40	Opening Remarks Program Officers: Dan Eleuterio/Josh Cossuth/Kate Mulreany
8.40 - 9.15	H.J.S. Fernando: Fatima: Year 2 Progress
9.15 – 9.40	Qing Wang: NPS Measurements and Analyses in Fatima Year 2
9.40 – 10.05	Clive Dorman: Work on synoptic aspects of fog at Sable Is. & summer 2022 field program
10.05 - 10.30	Eric Pardyjak: Update on University of Utah team activities
10.30 –10.55	Lian Shen: Towards an LES framework for site-specific simulations of atmospheric flows and fog
<b>10.55 – 11.10</b>	<b>Break</b>
Chair: Eric Pardyjak	
11.10 – 11.30	Ismail Gulpepe: Overview of marine fog microphysics and parameterizations
11.30 – 11.50	Luc Lenain: Results from remotely operated vehicles during Fatima
11.50 – 12.10	Sebastian Hoch: Update on radiation & radiative heating observations on Sable Island
12.10 - 12.30	David Richter: Large-eddy simulation of fog droplet microphysics
12.30 - 12.45	Sasa Garbesek: Brief update on NRL activities
<b>12.45 – 1.50</b>	<b>Lunch - Box lunch at Guest House</b>
Chair: Clive Dorman	
1.50 - 2.05	Kelly Huang: The role of environmental turbulence in the lifecycle of marine fog elucidated by the super combo probe
2.05 - 2.20	(Zoom) Dave Ortiz-Suslow: & preliminary findings from the Sable Lee Observing Period (SLOP) during Fatima 2022
2.20 – 2.35	(Zoom) Iossif Lozovatsky: Marine turbulence near Hibernia & Nova Scotia shelf breaks
2.35 – 2.50	Stef Bardoel: Observations of internal boundary-layer growth over Sable Island
2.50 – 3.05	Thomas Hinz: Fog genesis at evening transition on Sable Island
3.05 – 3.20	Anne Dowling: 8 Days in Hibernia grid: Intermittent fog encounters
3.20 – 3.45	Sen Wang: Layering in stable marine boundary layer & its observations during marine fog events in Fatima campaign
<b>3.45 - 4.00</b>	<b>Break</b>
Chair: Joe Fernando	
4.00-4.15	Ed Creegan: Fatima Cruise on Atlantic Condor
4.15-4.30	(Zoom) Andrey Grachev: Atmospheric turbulence measurements at Sable Island with & without fog
4.30-4.45	(Zoom) Seok Lee, Jae Hak Lee & KI Chang: R/V Onnuri overview & Yellow Sea campaigns
4.45-5.00	(Zoom) Joo Wan Cha. - Comments on NIMS Participation in Fatima-2023

**6.30 - Dinner: Rio Grande Cafe (258 S 1300 E, Salt Lake City, UT 84102) – (1.4 mile) 2.2 km walk**



**Thursday 23 February 2023**

Chair: Lian Shen	
8.30 - 8.45	(Zoom) Trevor VandenBoer: Pollutants, oxidants, & reactive nitrogen gases during Fatima 2022
8.45 - 9.00	(Zoom) Leyla Salehpoor: Fog aerosol chemistry over the Northwest Atlantic Ocean during Fatima 2022
9.00 – 9.15	Rachel Chang: Aerosol & fog droplet microphysics on the Condor as part of Fatima 2022
9.15 – 9.30	(Zoom) Kevin Keefer: A novel nano-bioaerosol sampler and electro-biodetector for leading edge fog forensic research
9.30-9.45	Darko Koracin: Synoptic processes leading to development of a deep marine fog
9.45-10.00	(Zoom) Reneta Dimitrova: WRF-LES numerical simulations of a mixing fog event during C-FOG campaign
<b>10.00-10.30</b>	<b>Break</b>
Chair: Qing Wang	
10.30 – 10.45	Dhiraj Singh: Low-cost hot-wire LWC probe update & results
10.45 – 11.00	Alexei Perelet: Using two perpendicular infrared scintillometers to evaluate the evolution of marine fog across Sable Island during the Fatima campaign
11.00-11.15	(Zoom) Martin Gallagher: Brief update on Fatima aerosol measurements
11.15-11.30	(Zoom) Perter Taylor and Zheqi Chen: WRF modeling during Fatima
11.30-11.45	(Zoom) Terry Bullock: Operational fog model prediction accuracy
<b>12.00-1.00</b>	<b>Lunch - Box lunch at Guest House</b>
Chair: J. Fernando	
1.00-1.45	<p>Group Issues to Discuss</p> <ul style="list-style-type: none"> <li>• 2023 Fatima Yellow Sea Experiment (June 21 to July 10; 5 days mob/demob) On R/V Onnuri, belongs to KIOST, PI: Seok Lee Joined by KMA/NIMS – additional ship and an aircraft. Will have a site visit to Jangmok (March 22 to 24). Shipping (ProteQ) or other mechanisms</li> <li>• Data from Fatima-2022 (currently on a google drive)</li> <li>• Ice Fog-2025 (Gultepe submitted a planning letter to ARM)</li> <li>• QJRMS Special Issue (Eric, Qing, Lian)</li> <li>• BAMS Article (plus Proc. Roy. Soc.)</li> <li>• Multidisciplinary collaborations</li> </ul>
1.45-2.30	<p>Overall Project Review Discussion:</p> <ul style="list-style-type: none"> <li>• Have addressed proposed science activities, our science contributions/impact so far (quality) – From field to high-resolution numerics (recap)</li> <li>• Productivity and broader impacts</li> <li>• Interdisciplinarity of the project</li> <li>• Follow up activities (near future, including Fatima-2023 campaign)</li> <li>• Follow up activities (over the project)</li> <li>• Possible follow-up transitions</li> </ul>
2.30-3.00	Advisory Committee Remarks (James Doyle, Andy Heymsfield & Matt Wilbanks)
3.00 – 3.15	Program Manager's Remarks
	Closure

**6.30 - Dinner: Himalayan Kitchen (360 State St, Salt Lake City, UT 84111; on TRAX Redline)**