

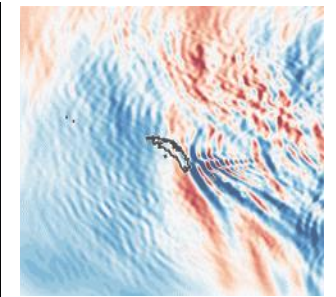
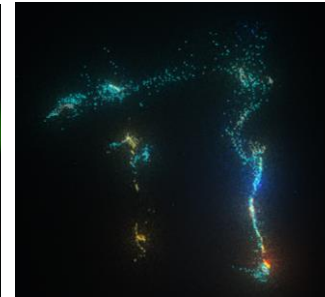
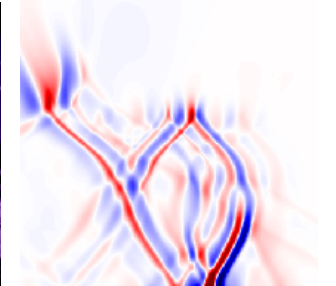
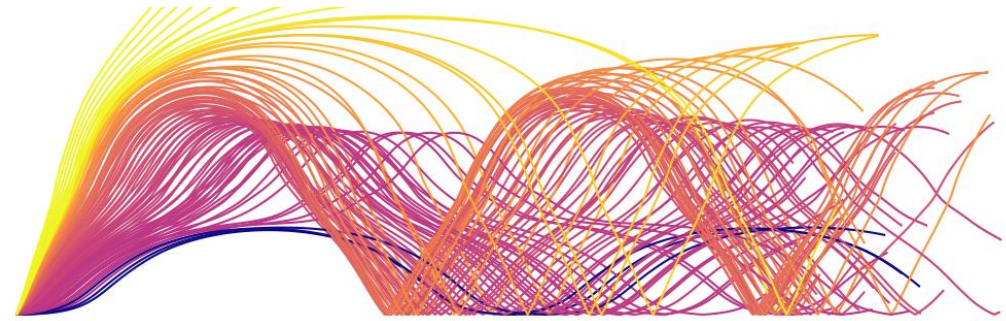
# Waves & Geosciences Spring School: Infrasound and beyond

28<sup>th</sup> March - 1<sup>st</sup> April 2022, Lyon, France

[https://acoustique.ec-lyon.fr/letma\\_school\\_uk.php](https://acoustique.ec-lyon.fr/letma_school_uk.php)

This spring school is aimed at students, researchers and engineers, interested in geophysical wave phenomena. The objective is to present the state-of-the-art on different topics (atmospheric physics, acoustic propagation, statistical methods, machine learning, uncertainty quantification, ...), with a focus on dual problems and climate modelling. Lectures will be complemented by hands-on lab sessions.

The spring school is organized by LETMA, a joint laboratory between CEA, Sorbonne University, Centrale Lyon and CNRS, that focuses on the analysis of atmospheric phenomena generating infrasound. The school is co-funded by CeLyA, a laboratory of excellence bringing together the acousticians of Lyon and Saint-Etienne.



Monday March 28	Tuesday March 29	Wednesday March 30	Thursday March 31	Friday April 1
	08:00 - 08: 30 Welcome coffee	08:00 - 08: 30 Welcome coffee	08:00 - 08: 30 Welcome coffee	08:00 - 08: 30 Welcome coffee
	08:30 - 10 :00 Physics of infrasound propagation R. Waxler (NCPA)	08:30 - 10 :00 Presentations on LETMA's activities	08:30 - 10 :00 Presentations on LETMA's activities	08:30 - 10 :00 Data assimilation O. Marsden (ECMWF)
	Coffee Break	Coffee Break	Coffee Break	Coffee Break
	10:30 - 12:00 Uncertainty quantification O. Le Maitre (CMAP)	10:30 - 12:00 Contributed presentations	10:30 - 12:00 Machine learning in geosciences S. Hosking (BAS)	10:30 - 12:00 Inverse problems for atmospheric dispersion L. Soulhac (Centrale Lyon)
13:00 - 14:00 Welcome coffee - Introduction	12:00 - 14 :00 Lunch break	12:00 - 14 :00 Lunch break	12:00 - 14 :00 Lunch break	12:00 - 14 :00 Lunch break
14:00 - 15:30 CTBTO and advances in infrasound monitoring P. Mialle (CTBTO) (TBC)	14:00 - 15:30 Detection algorithm for infrasound A. Le Pichon (CEA) M. Charbit (Telecom Paris)	14:00 - 15:00 Transfer to Centrale Lyon	14:00 - 15:30 Lightning T. Farges (CEA) F. Coulouvrat (SU)	
		15:00 - 16:30 Lab session 1		
Coffee Break	Coffee Break	Coffee Break	Coffee Break	
16:00 - 17:30 Atmosphere, structure and dynamics TBD	16:00 - 17:30 Infrasound sources in geosciences J. Assink (KNMI)	17:00 - 18:30 Lab session 2	16:00 - 17:30 Volcano infrasound M. Ripepe (Firenze U.)	
		Return trip to Valpré		
			Gala dinner	

Lab sessions: Detection, association and data analysis J. Vergoz (CEA) Propagation modeling (platform LETMA) C. Khodr (Centrale Lyon)

All spring school events including the lectures given by internationally recognized experts will be hosted at Valpré conference center close to Ecole Centrale de Lyon in Ecully, and 20'-30' from downtown Lyon by public transportation. Courses, lunches, coffee breaks and the gala dinner are free of charge. In order to promote discussions, the participants will participate in two lab sessions and have the opportunity to present their work in poster sessions. All lectures will be given in English by renowned international researchers. A registration form is attached to this mail. Please send it as soon as possible and in any case before March 11<sup>th</sup> (the number of participants is limited) to: [carine.zambardi@ec-lyon.fr](mailto:carine.zambardi@ec-lyon.fr)

More information is available at : [https://acoustique.ec-lyon.fr/letma\\_school\\_uk.php](https://acoustique.ec-lyon.fr/letma_school_uk.php)