iTWIST: international Traveling Workshop on Interactions between low-complexity data models and Sensing Techniques

DOCTORAL SCHOOL

	Monday 19	Tuesday 20
8:15 - 10:15	**Ulugbek Kamilov** *"Computational Imaging with Convex and Non-Convex Optimization".* Part I.	**Alexandre Gramfort** *"Optimization strategies for fast inverse problems under sparsity constraints".* Part II.
10:15 - 10:45	*Coffee*	*Coffee*
10:45 - 12:15	**Simon Foucart** *"Flavors of compressive sensing"* Part I.	**Laurent Jacques** *"Quantized compressed sensing and related data embeddings"* Part I.
12:15 - 14:00	*Lunch at CIRM*	*Lunch at CIRM*
14:00 – 16:00	**Alexandre Gramfort** *"Optimization strategies for fast inverse problems under sparsity constraints".* Part I.	**Ulugbek Kamilov** *"Computational Imaging with Convex and Non-Convex Optimization".* Part II.
16:00 – 16:30	*Coffee & Tea Break*	*Coffee & Tea Break*
16:30 – 18:00	**Simon Foucart** *"Flavors of compressive sensing"* Part II.	**Laurent Jacques** *"Quantized compressed sensing and related data embeddings"* Part II.
19:00 - 20h30	Dinner at CIRM	Dinner at CIRM

WORKSHOP

	Wednesday 21	Thursday 22	Friday 23
8:30 - 9:00 9:00 – 9:30	M. Davies, "Inexact Gradient Projection and Fast Data Driven Compressed Sensing: theory and application"	L. Daudet, "Optical random features for large-scale machine learning"	D. Molitor & D. Needell, "A simple approach to hierarchical classification"
9:30 – 10:00 10:00 - 10:30	[S1] "Low-complexity models for accuracy tradeoffs in numerical methods" (Id: 42, 12)	[S4] "Random sensing models for signal observations and classifications" (Id: 34, 15)	[S7] "Learning with low-complexity data models" (Id: 26 ,16)
10:30 - 11:00	*Coffee & Tea break*	*Poster session (with Coffee & Tea break)*	*Coffee & Tea break*
11:00 - 11:30 11:30 - 12:00	[S2] "Low-complexity models for signal processing methods" (Id: 36, 17)		[S5] "Optimization methods for recovering low-complexity signals" -- Part II (Id: 41, 13)
12:00 - 14:00	*Lunch at CIRM*	*Lunch at CIRM*	*Lunch at CIRM*
14:00 – 14:30 14:30 - 15:00	*Free time (discussion rooms available)*	*Free time (discussion rooms available)*	S. Dirksen, "Robust one-bit compressed sensing with non-Gaussian measurements"
15:00 – 15:30 15:30 – 16:00	B. Adcock, "Compressed sensing and high-dimensional approximation: theory and applications"	G. Kutyniok, "Compressed Sensing from an Analysis Viewpoint: Successes and Failures"	[S8] "Bilinear and Continuous Inverse Problem Solving" (Id: 19, 39)
16:00 – 16:30	[S3] "Compressive sensing: theory and applications" -- Part I (Id: 30)	[S5] "Optimization methods for recovering low-complexity signals" -- Part I (Id: 21)	Closing words
16:30 – 17:00	*Coffee*	*Coffee*	
17:00 - 17:30 17:30 – 18:00	S. Foucart, "Standard, One-Bit, and Saturated Compressive Sensing"	U. Kamilov, "Signal Processing for Nonlinear Diffractive Imaging: Acquisition, Reconstruction, and Applications"	
18:00 - 18h30	[S3] "Compressive sensing: theory and applications" -- Part II (Id: 20)	[S6] "Non-linear imaging problems with low-complexity regularization" (Id: 23)	

	Wednesday 21	Thursday 22	Friday 23
19:00 - 20h30	Dinner at CIRM	*Social event*	Dinner at CIRM (for participants leaving on Saturday)