

# ICORS 2021: International Conference on Robust Statistics

September 20-24, 2021

## Program overview

**Monday Sep 20 Workshop on Robustness & R (*Registration is necessary*)**  
13:00 14:15 Todorov, Valentin: Robust Principal Component and Discriminant Analysis  
14:30 15:45 Dürre, Alexander: Robust Time Series Analysis  
16:15 17:30 Alfons, Andreas: Sparse Robust Regression and Model Selection

**Tuesday Sep 21**  
09:20 09:30 Opening  
09:30 10:50 CP1  
11:20 12:20 CP2  
14:00 15:20 CP3  
15:50 17:20 IS1  
17:25 18:25 Keynote: Fan

**Wednesday Sep 22**  
14:00 15:20 CP4  
15:50 16:30 Short Papers  
16:35 18:05 IS2

**Thursday Sep 23**  
09:30 10:50 CP5  
11:20 12:20 CP6  
14:00 15:20 CP7  
15:50 17:20 IS3  
17:25 18:25 Keynote: Rousseeuw

**Friday Sep 24**  
09:30 10:20 Invited: Biggio  
10:50 11:40 Invited: Suykens

Keynote	V	Fan, Jianqing	High-dimensional robust inference: Farming significant and important variables
Keynote	V	Rousseeuw, Peter	Flagging cellwise outliers using a robust covariance matrix
Invited	?	Biggio, Battista	Machine learning (for) security: Lessons learned and future challenges
Invited	V	Suykens, Johan	Deep learning, kernel machines and robustness

#### Invited Sessions:

IS1	P	Van Aelst, Stefan (Organizer)	Robustness for Functional Data
	V	Wang, Huixia Judy	Sparse Learning and Structure Identification for Ultra-High-Dimensional Image-on-Scalar Regression
	V	Boente, Graciela	A robust smoothed approach to functional canonical correlation analysis
	V	Salibian-Barrera, Matias	Robust Boosting for functional regression
IS2	V	Fried, Roland (Organizer)	Time Series Analysis
	V	Taskinen, Sara	Blind source separation based on M autocovariance matrices
	V	Yohai, Victor Jaime	Robust Forecasting of Multiple Time Series with Robust One-Sided Dynamic Principal Components
	V	La Vecchia, Davide	Inference for multivariate time series models: a measure transportation approach
IS3	V	Croux, Christophe (Organizer)	Cellwise Robustness and Sparsity
	P	Hron, Karel	Cellwise robust regression with compositional and real-valued covariates
	V	Wilms, Ines	A cellwise robust lasso estimator
	V	Zamar, Ruben	Data-Driven Diverse Logistic Regression Ensembles

#### Contributed Sessions:

CP1	General robustness		
	P	Hennig, Christian	Is there a role for model assumption testing in applied statistics?
	V	Werner, Tino	Global quantitative robustness of instance ranking problems
	V	Jordanova, Pavlina Kalcheva	Tails and Probabilities for p-Outside values
CP2	V	Nielsen, Bent	A model where the Least Trimmed Squares estimator is maximum likelihood
	Tests, depth		
	P	Malcherczyk, Dennis	The K-sign depth and generalizations
	P	Müller, Christine H.	K-sign depth tests: Some properties and some open problems
CP3	P	Jureckova, Jana	Nonparametric Tests in Linear Model with Autoregressive Errors
	Linear models and extensions		
	P	Saraceno, Giovanni	Robust estimation under Linear Mixed Models: a Minimum Density Power Divergence approach

	P	Fačevićová, Kamila	Use of a robust blind source separation approach for XRF core scanning of soft sediments
	V	Martinez, Alejandra Mercedes	A B-spline robust approach for partially linear additive models
	V	Cantoni, Eva	Robust Fitting for Generalized Additive Models for Location, Scale and Shape
CP4		Functional and high-dimensional data	
	P	Kalogridis, Ioannis	Robust optimal estimation of location from discretely sampled functional data
	P	García-Escudero, Luis A.	Cluster Analysis with cellwise outliers with applications to robust functional clustering
	V	Monti, Gianna Serafina	A Robust Approach to Classification and Regression Tasks for Microbiome Data
	V	Ghosh, Abhik	Robust adaptive variable selection in ultra-high dimensional linear regression models
CP5		Outliers, anomaly detection	
	P	Rahbani, Dana	A Robust Acquisition Function for Sequential Gaussian Process Inference
	P	Alfons, Andreas	Outlier Detection in Rating-Scale Data via Autoencoders
	P	Insolia, Luca	Doubly Robust Feature Selection with Mean and Variance Outlier Detection and Oracle Properties
	V	Raymaekers, Jakob	Transforming variables to central normality
CP6		Time series	
	V	Kharin, Alexey	Robustness in sequential decision making on parameters of stochastic data flows
	V	Kharin, Yuriy	Discrete-valued time series: parsimonious models and statistical analysis
	V	Axt, Ieva	Robust scale estimation under shifts in the mean
CP7		Linear regression models	
	P	Nesrstová, Viktorie	Variable selection in compositional data using balance coordinates based on robust PLS
	P	Arslan, Olcay	Robust penalized empirical likelihood estimation method for linear regression
	V	Koul, Hira L	Weighted empirical minimum distance estimators in errors in variables linear regression models
	V	Acitas, Sukru	A new robust Liu-type estimator for regression based on RAMML estimators
Short Papers			
	P	Brune, Barbara	A Comparison Study of Robust Mixed Effects Models for Analyzing Degradation of Photovoltaic Modules
	P	Neubauer, Lukas	Robust functional principal component regression: a comparison
	V	Aydemir, Onder	A Robust Firefly Algorithm Based Feature Selection Method for EEG Signal Classification
	V	Pérez, Virgilio	Over time robust estimation of subjective latent variables from cross-section rep. surveys under meas. err.
	P	means presentation in person	
	V	means virtual presentation	