



TIME	Tutorial Day (Innovation center)
<b>Monday 17th September</b>	
<b>10:30-12:00</b>	<p style="text-align: center;"><b>Tutorial 1</b></p> <p style="text-align: center;"><b>Title to be announced</b></p> <p style="text-align: center;"><i>Scott Ferson</i></p>
<b>12:00-13:00</b>	<b>Lunch</b>
<b>13:00-15:00</b>	<p style="text-align: center;"><b>Tutorial 2</b></p> <p style="text-align: center;"><b>Imprecise Markov Chains</b></p> <p style="text-align: center;"><i>Jasper De Bock and Thomas Krak</i></p>
<b>15:00-15:30</b>	<b>Coffee Break</b>
<b>15:30-17:00</b>	<p style="text-align: center;"><b>Tutorial 3</b></p> <p style="text-align: center;"><b>Random fuzzy sets and Statistics with imprecise-valued data</b></p> <p style="text-align: center;"><i>Maria Gil</i></p>
<b>19:00</b>	<b>Welcome Cocktail (St-Nicolas building)</b>



TIME	SESSION 1 (Innovation center)	SESSION 2 (Heudiasyc -GI42)
<b>Tuesday 18th September</b>		
8:30-9:00	<b>REGISTRATION (Innovation center)</b>	
9:00-9:10	<b>Conference opening (Innovation center)</b>	
9:10-10:10	<b>Time-dependent models (Transfert centre)</b> Chair: P. Shenoy	
	<ul style="list-style-type: none"> <li>• <b>Monitoring of Time Series Using Fuzzy Weighted Prediction Models.</b> <i>Olqierd Hryniewicz and Katarzyna Kaczmarek-Majer</i></li> <li>• <b>Computing Inferences for Large-Scale Continuous-Time Markov Chains by Combining Lumping with Imprecision.</b> <i>Alexander Erreygers and Jasper De Bock</i></li> <li>• <b>An Imprecise Probabilistic Estimator for the Transition Rate Matrix of a Continuous-Time Markov Chain.</b> <i>Thomas Krak, Alexander Erreygers and Jasper De Bock</i></li> </ul>	
10:10-10:40	<b>COFFEE BREAK (Innovation center)</b>	
10:40-11:40	<b>Keynote speaker 1: Thomas Augustin (Innovation center)</b> Chair: G. de Cooman	
11:40-13:00	<b>Clustering (Innovation center)</b> Chair: M.-B. Ferraro	
	<ul style="list-style-type: none"> <li>• <b>Robust Fuzzy Clustering of Non-Linear Data.</b> <i>Maria Brigida Ferraro and Paolo Giordani</i></li> <li>• <b>E2CM: an Evolutionary version of Evidential C-Means clustering algorithm.</b> <i>Zhi-Gang Su, Hong-Yu Zhou, Pei-Hong Wang, Gang Zhao and Ming Zhao</i></li> <li>• <b>On evidential clustering with partial supervision.</b> <i>Violaine Antoine, Kévin Gravouil and Nicolas Labroche</i></li> <li>• <b>An empirical study to determine the optimal k in Ek-NNclus method.</b> <i>Yiru Zhang, Tassadit Bouadi and Arnaud Martin</i></li> </ul>	
13:00-14:00	<b>LUNCH BREAK (Innovation center)</b>	
14:00-15:20	<b>Theory of belief functions</b> Chair: D. Dubois	<b>Limits and expectations</b> Chair: E. Miranda
	<ul style="list-style-type: none"> <li>• <b>Linear Belief Functions for Data Analytics.</b> <i>Liping Liu</i></li> <li>• <b>From relations between sets to relations between belief functions.</b> <i>Sébastien Destercke, Frederic Pichon and John Klein</i></li> <li>• <b>A Decomposable Entropy of Belief Functions in the Dempster-Shafer Theory.</b> <i>Radim Jirousek and Prakash P. Shenoy</i></li> <li>• <b>An ordered family of consistency measures of belief functions.</b> <i>Ben Abdallah Nadia, Anne-Laure Jousset and Frédéric Pichon</i></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Choquet theorem for random sets in Polish spaces and beyond.</b> <i>Pedro Terán</i></li> <li>• <b>Contrasting Two Laws of Large Numbers from Possibility Theory and Imprecise Probability.</b> <i>Pedro Terán and Elisa Pis Vigil</i></li> <li>• <b>Continuity of the Shafer-Vovk-Ville Operator.</b> <i>Natan T'Joens, Gert De Cooman and Jasper De Bock</i></li> <li>• <b>Beyond Doss and Frechet expectation sets.</b> <i>Juan Jesus Salamanca Jurado</i></li> </ul>
15:20-15:40	<b>COFFEE BREAK (Innovation center)</b>	
15:40-17:00	<b>Uncertainty representations (Innovation center)</b> Chair: S. Ferson	
	<ul style="list-style-type: none"> <li>• <b>Z-numbers as generalized probability boxes.</b> <i>Didier Dubois and Henri Prade</i></li> <li>• <b>Generalising the Pari-Mutuel Model.</b> <i>Paolo Viciq, Renato Pelessoni and Chiara Corsato</i></li> <li>• <b>Outer approximations of coherent lower probabilities using belief functions.</b> <i>Ignacio Montes, Enrique Miranda and Paolo Viciq</i></li> <li>• <b>On Missing Membership Degrees: Modelling Non-existence, Ignorance and Inconsistency.</b> <i>Michal Burda, Petra Murinová and Viktor Pavliska</i></li> </ul>	
17:00-18:00	<b>BFAS GENERAL ASSEMBLY (Innovation center)</b>	
19:00	<b>Town Hall reception</b>	

TIME	SESSION 1 (Innovation center)	SESSION 2 (Heudiasyc -GI42)
<b>Wednesday 19th September</b>		
9:00-10:00	<b>Reliability (Innovation center)</b> Chair: T. Augustin <ul style="list-style-type: none"> <li>• <b>Imprecise statistical inference for accelerated life testing data: imprecision related to the log-rank test.</b> <i>Abdullah Ahmadini and Frank Coolen</i></li> <li>• <b>Imprecise probability inference on masked multicomponent system.</b> <i>Daniel Krpelik, Frank P.A. Coolen and Louis Aslett</i></li> <li>• <b>Birnbaum's importance measure extended for non-coherent systems.</b> <i>Ayyoub Imakhlaf and Mohamed Sallak</i></li> </ul>	
10:00-10:30	<b>COFFEE BREAK (Innovation center)</b>	
10:30-11:30	<b>Keynote speaker 2: Scott Ferson (Innovation center)</b> Chair: P. Grzegorzewski	
11:30 -11:40	<b>BREAK (Innovation center)</b>	
11:40-13:00	<b>Classification (Innovation center)</b> Chair: F. Pichon <ul style="list-style-type: none"> <li>• <b>Density estimation with imprecise kernels: application to classification.</b> <i>Guillaume Dendievel, Sébastien Destercke and Pierre Wachalski</i></li> <li>• <b>Uncertainty-Aware Parzen-Rosenblatt Classifier for Multiattribute Data.</b> <i>Mohamed El Yazid Boudaren, Houdaifa Boukersoul and Ali Hamache</i></li> <li>• <b>Dynamic Classifier Selection Based on Imprecise Probabilities: a Case Study for the Naive Bayes Classifier.</b> <i>Meizhu Li, Jasper De Bock and Gert De Cooman</i></li> <li>• <b>Logistic regression revisited: belief function analysis.</b> <i>Thierry Denoeux</i></li> </ul>	
13:00-14:00	<b>LUNCH BREAK (Innovation center)</b>	
14:00-15:20	<b>Fuzzy modelling</b> Chair: A. Lubiano <ul style="list-style-type: none"> <li>• <b>A net premium model for life insurance under a sort of generalized uncertain interest rate.</b> <i>Dabuxilatu Wang</i></li> <li>• <b>Descriptive comparison of the rating scales through different scale estimates. Simulation-based analysis.</b> <i>Irene Arellano, Beatriz Sinova, Sara de La Rosa de Sáa, María Asunción Lubiano and María Angeles Gil</i></li> <li>• <b>Regression ensemble with linguistic descriptions.</b> <i>Jiří Kupka and Pavel Rusnok</i></li> <li>• <b>Case study-based sensitivity analysis of scale estimates w.r.t. the shape of fuzzy data.</b> <i>María Asunción Lubiano, Carlos Carleos, Manuel Montenegro and María Ángeles Gil</i></li> </ul>	<b>Information fusion</b> Chair: J. Klein <ul style="list-style-type: none"> <li>• <b>Prejudiced information fusion using belief functions.</b> <i>Didier Dubois, Francis Faux and Henri Prade</i></li> <li>• <b>On the Conflict Measures Agreed with the Combining Rules.</b> <i>Alexander Lepskiy</i></li> <li>• <b>General geometry of belief function combination.</b> <i>Fabio Cuzzolin</i></li> <li>• <b>Study of distributed data fusion using Dempster rule and cautious operator.</b> <i>Romain Guyard and Véronique Cherfaoui</i></li> </ul>
15:20-15:40	<b>COFFEE BREAK (Innovation center)</b>	
15:45-17:00	<b>Preferences (Innovation center)</b> Chair: A. Martin <ul style="list-style-type: none"> <li>• <b>Decision Making: A Beliefs, Preferences and Constraints Model.</b> <i>Aouatef Rouahi, Kais Ben Salah and Khaled Ghedira</i></li> <li>• <b>An Evidential Collaborative Filtering Approach based on Items Contents Clustering.</b> <i>Raoua Abdelkhalek, Imen Boukhris and Zied Elouedi</i></li> <li>• <b>Cycle-free cuts of the reciprocal relation generated by random variables that are pairwise coupled by a Frank copula.</b> <i>Hans De Meyer and Bernard De Baets</i></li> <li>• <b>Some partial order relations on a set of random variables.</b> <i>Bernard De Baets and Hans De Meyer</i></li> </ul>	

TIME	SESSION 1 (Innovation center)	SESSION 2 (Heudiasyc -GI42)
<b>Thursday 20th September</b>		
9:00-10:00	<b>Coherence (Innovation center)</b> Chair: P. Vicig	
	<ul style="list-style-type: none"> <li>• <b>Coherence, compatibility and the running intersection property.</b> <i>Enrique Miranda and Marco Zaffalon</i></li> <li>• <b>Characterization of conditional submodular capacities: Coherence and extension.</b> <i>Giulianella Coletti, Davide Petturiti and Barbara Vantaggi</i></li> <li>• <b>A Desirability-Based Axiomatisation for Coherent Choice Functions.</b> <i>Jasper De Bock and Gert De Cooman</i></li> </ul>	
10:00-11:30	<b>Spotlights, followed by poster session + coffee break (Innovation center)</b> List of posters	
	<ul style="list-style-type: none"> <li>• <b>Fuzzy regression model for trapezoidal data using fuzzy matrix.</b> <i>Jin Hee Yoon</i></li> <li>• <b>Interval-valued kriging and climate applications.</b> <i>Brennan Bean and Yan Sun</i></li> <li>• <b>Provenance across belief combination.</b> <i>Pawel Kowalski and Trevor Martin</i></li> <li>• <b>Evidential recommender system based on collaborative filtering using different combination rules.</b> <i>Xiaoyun Yang and Kuang Zhou</i></li> <li>• <b>Supply Chain Equilibrium with Upstream Demand Uncertainty and Continuous Beliefs: a Comparative Statics Analysis.</b> <i>Costis Melolidakis, Stefanos Leonardos and Constandina Koki</i> (full paper)</li> <li>• <b>Improved performance of EK-NNclus by selecting appropriate parameter.</b> <i>Qian Wang and Zhigang Su</i> (full paper)</li> </ul>	
11:30-12:30	<b>Keynote speaker 3: Ryan Martin (Innovation center)</b> Chair: T. Denoeux	
12:30-13:30	<b>LUNCH BREAK (Innovation center)</b>	
13:30-14:50	<b>Information measures</b> Chair: B. Sinova	<b>Applications of belief functions</b> Chair: D. Mercier
	<ul style="list-style-type: none"> <li>• <b>Central moments of a fuzzy random variable using the signed distance: a look towards the variance.</b> <i>Redina Berkachy and Laurent Donzé</i></li> <li>• <b>Belief and plausibility functions on the space of scalar products and applications.</b> <i>Juan Jesus Salamanca Jurado</i></li> <li>• <b>The Kantorovich Problem and Wasserstein Metric in the Theory of Belief Functions.</b> <i>Andrey G. Bronevich and Igor N. Rozenberg</i></li> <li>• <b>Measures of dispersion for interval data.</b> <i>Przemyslaw Grzegorzewski</i></li> </ul>	<ul style="list-style-type: none"> <li>• <b>The Belief Functions Theory for Sensor Localization in Indoor Wireless Networks.</b> <i>Daniel Alshamaa, Farah Mourad-Chehade and Paul Honeine</i></li> <li>• <b>An evidential k-nearest neighbors combination rule for tree species recognition.</b> <i>Siwar Jendoubi, Didier Coquin and Reda Boukezzoula</i></li> <li>• <b>Evidential community detection based on density peaks.</b> <i>Kuang Zhou, Quan Pan and Arnaud Martin</i></li> <li>• <b>Evidential Independence Maximization on Twitter Network.</b> <i>Siwar Jendoubi, Mouna Chebbah and Arnaud Martin</i></li> </ul>
14:50-15:20	<b>COFFEE BREAK (Innovation center)</b>	
15:20-16:40	<b>Classification (Innovation center)</b> Chair: B. Quost	
	<ul style="list-style-type: none"> <li>• <b>Active evidential calibration of binary SVM classifiers.</b> <i>Sébastien Ramel, Frédéric Pichon and François Delmotte</i></li> <li>• <b>A Compact Belief Rule-Based Classification System with Evidential Clustering.</b> <i>Lianmeng Jiao, Xiaojiao Geng and Quan Pan</i></li> <li>• <b>Exploiting domain-experts knowledge within an evidential process for case base maintenance.</b> <i>Safa Ben Ayed, Zied Elouedi and Eric Lefevre</i></li> <li>• <b>An Evidential K-Nearest Neighbor Classifier based on Contextual Discounting and Likelihood Maximization.</b> <i>Orakanya Kanjanatarakul, Siwarat Kuson and Thierry Denoeux</i></li> </ul>	
19:00-23:00	<b>Banquet dinner</b>	

TIME	SESSION 1 (Main amphitheatre)	SESSION 2 (Innovation center)
<b>Friday 21th September</b>		
<b>9:40-11:00</b>	<b>Statistical estimation (Innovation center)</b> <b>Chair: M. Gil</b> <ul style="list-style-type: none"> <li>• <b>Empirical comparison of the performance of location estimates of fuzzy number-valued data.</b> <i>Beatriz Sinova and Stefan Van Aelst</i></li> <li>• <b>Estimation of Classification Probabilities in Small Domains Accounting for Nonresponse Using an Imprecise Probability Approach.</b> <i>Aziz Omar and Thomas Augustin</i></li> <li>• <b>A maximum likelihood approach to inference under coarse data based on minimax regret.</b> <i>Romain Guillaume and Didier Dubois</i></li> <li>• <b>Generalised max entropy classifiers.</b> <i>Fabio Cuzzolin</i></li> </ul>	
<b>11:00-11:40</b>	<b>COFFEE BREAK (Innovation center)</b>	
<b>11:40-12:40</b>	<b>Application (Innovation center)</b> <b>Chair: A.-L. Jusselme</b> <ul style="list-style-type: none"> <li>• <b>An heuristic approach for the Robust Flight Level Assignment problem.</b> <i>Akli Fundo, Dritan Nace and Chenghao Wang</i></li> <li>• <b>Control Charts Designed Using Model Averaging Approach for Phase Change Detection in Bipolar Disorder.</b> <i>Katarzyna Kaczmarek-Majer, Olgierd Hryniewicz, Karol Opara, Weronika Radziszewska, Anna Olwert, Jan Owsiniński and Sławomir Zadrozny</i></li> <li>• <b>Application of Belief Functions to Levee Assessment.</b> <i>Théo Dezert, Yannick Fargier, Sérgio Palma Lopes and Philippe Côte</i></li> </ul>	
<b>12:40-14:00</b>	<b>Closing ceremony + LUNCH BREAK (Innovation center)</b>	