



PROGRAMME

Monday 13 September 2010

8h-9h Registration at the Faculty of Bioscience Engineering, Building E

9h Conference opening by the geoENVia Chair Philippe Renard

Chair: P. Goovaerts

9h15	Keynote I: C. Scheidt & J. Caers	Spatial modeling with ensembles in metric space
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Session 1: Theory I

10h	<u>G. Mariethoz</u> , P. Renard, J. Straubhaar	The direct sampling method to perform multivariate multiple-point geostatistical simulations
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10h15	<u>A. Boucher</u> , G. Phelps, C. Cronkite-Ratcliff	Simulating complex 3D alluvial stratigraphy by combining training-image-based algorithms and vertical variograms
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10h30	<u>J. Straubhaar</u> , Ph. Renard, G. Mariethoz, R. Froidevaux, O. Besson	List-based algorithm for multiple-point statistics simulation
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10h45 Coffee break

Chair: J. Boisvert

Session 2: Theory II

11h05	<u>R. Labourdette</u> , T. Chugunova	Multiplepoint statistics with auxiliary properties applied to sustainable development. Example from urban expansion prediction of Pau agglomeration (France)
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11h20	<u>M. Huysmans</u> , A. Dassargues	Direct multiple-point geostatistical simulation of edge properties for modeling thin irregularly-shaped surfaces
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11h35	<u>C. Scheidt</u> , J. Caers, Y. Chen, L.J. Durlofsky	Rapid construction of ensembles of high-resolution models constrained to dynamic data
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11h50	A. Parra, <u>J.M. Ortiz</u>	Conditional multiple point simulation with texture synthesis
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12h05	<u>R. Tolosana-Delgado</u> , J.J. Egozcue, A. Sánchez-Arcilla, J. Gómez	Classifying wave forecasts with model-based geostatistics and the Aitchison distribution
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12h20	Lunch	
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<i>Chair: D. D'Or</i>		
Session 3: Soil		
13h30	<u>E. Meerschman</u> , M. Van Meirvenne	Application of multiple point geostatistics in soil science: the reconstruction of polygonal networks of ice-wedge pseudomorphs
13h45	G.M. Siqueira, J.Dafonte Dafonte, <u>J. Paz-Ferreiro</u>	Spatial correlation between weeds and soil apparent electrical conductivity measured using electromagnetic induction
14h	<u>M. Robinson</u> , J. McKinley, A. Ruffell, M. Young	The improvement of peat depth models for Northern Ireland through the investigation of Tellus data
14h15	<u>J. Van de Wauw</u> , P.A. Finke	Screening the Flemish (Belgian) soil drainage class map for its currency
14h30	R. Kerry, B. Rawlkins, <u>P. Goovaerts</u>	Area-to-point kriging of soil texture: an efficient use of legacy soil data from polygon maps

14h45	Poster session: Tour of posters, 5 min per poster	
<i>Chairs: Ph. Renard &</i>		

16h20	Coffee break	
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<i>Chair: A. Boucher</i>		
Session 4: Geology		
16h40	L. Foresti, V. Demyanov, M. Christie, <u>M. Kanevski</u>	Multiple kernel models for reservoir characterization
16h55	S. Bhowmik, <u>C.A. Mantilla</u> , S. Srinivasan	Tracking CO ₂ plume migration during geologic sequestration using a probabilistic history matching approach
17h05	<u>J. McKinley</u> , A. Ruffell, M. Young	Determining local spatial variability from a regional airborne radiometric survey
17h20	<u>P. Tr. Simard</u> , E. Gloaguen, D. Marcotte, A. Boucher	Wavelet-based porosity simulation using high resolution analogue model and low-resolution tomographic data

18h30	Evening activity:	Guided tour through the historical centre of Ghent Meeting point: St-Baafsplein at the fountain (+/- 1 h)
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Chair: P. Bogaerts

8h45	Keynote II: G. Christakos	Spatiotemporal geostatistics and the environment: crossing Parmenides' gates and Morrison's doors
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Session 1: Hydrology I

9h30	<u>D. Pedretti</u> , M. Barahona-Palomo, D. Bolster, D. Fernández-García, X. Sanchez-Vila	Spatial assessment of infiltration capacity of soils for artificial recharge practices using Google Earth images
9h45	<u>L. Li</u> , H. Zhou, J.J. Gómez-Hernández	Transport upscaling using multi-rate mass transfer in three-dimensional highly heterogeneous porous media
10h	<u>R.Lilla Manzione</u> , E. Wendland, M.Knotters	Stochastic simulation of time series models combined with universal kriging: a framework to predict risks of water table depths in time and space
10h15	<u>H. Zhou</u> , J.J. Gómez-Hernández, L. Li	Performance of modified ensemble Kalman filter in non-Gaussian heterogeneous media
10h30	<u>E. Savelyeva</u> , S. Utkin	Stochastic modeling for liquid radioactive storage reservoir

10h45 Coffee break

Chair: A. Bárdossy

Session 2: Hydrology II

11h05	<u>B. Bourgine</u> , B. Lopez, N. Baran, D. Ratehau	Characterization of nitrate long term trends at regional scale using statistical and geostatistical tools. Example of the Loire_Brittany basin
11h20	<u>C. Cronkite-Ratcliff</u> , G. Phelps, A. Boucher	Contribution of geological heterogeneity characterization to uncertainty in predicting unsaturated zone flow
11h35	<u>C. P. Haslauer</u> , P. Guthke, A. Bárdossy, E.A. Sudicky	Effects of non-gaussian spatial dependence of hydraulic conductivity on hydrodynamic macrodispersion
11h50	<u>L. Li</u> , H. Zhou, J.J. Gómez-Hernández	A comparative study of three-dimensional hydraulic conductivity upscaling at the macrodispersion experiment (made) site, on Columbus Air Force Base in Mississippi

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Session 2: Hydrology II (continued)		
12h05	<u>B. Rogiers</u> , D. Mallants, O. Batelaan M. Gedeon, M. Huysmans, A. Dassargues	Geostatistical analysis of primary and secondary data in a sandy aquifer at Mol/Dessel, Belgium
12h20	<u>N. Jeannée</u> , D. Tapsoba	Improved mapping of daily precipitation over Quebec using the moving-geostatistics approach
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12h35	Lunch	
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<i>Chair: M. Huysmans</i>		
Session 3: Pollution I		
14h	<u>H. Kazianka</u> , J.Pilz	Objective bayesian analysis for the correlation parameters in gaussian copula-based spatial models
14h15	<u>D. D'Or</u> , D. Allard, R. Froidevaux	Incorporating non stationarity in categorical variables simulations with MCS
14h30	<u>P. Harris</u> , C. Brunsdon, M. Charlton	Visualisation techniques for moving window kriging
14h45	A. Gribov, <u>K. Krivoruchko</u>	Local polynomials for data detrending and interpolation in the presence of barriers
15h	<u>G. Mariethoz</u> , J. Caers, C. Scheidt	Multi-way sensitivity analysis using clustering techniques
15h15	<u>M. Kanevski</u> , V. Timonin, S. Robert, L. Foresti	Pattern recognition in environmental data using general regression neural networks
15h30	<u>J.B. Boisvert</u> , C.V. Deutch	Modelling locally varying anisotropy of CO ₂ emissions
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15h45	Coffee break	
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<i>Chair: M. Kanevski</i>		
Session 4: Pollution II		
16h15	<u>K. Henneböhl</u> , E.R. Pebesma, W.G. Müller	Efficient parametric variogram estimation for real-time interpolation of environmental monitoring data
16h30	<u>A. Govaerts</u> , A. Vervoort	Automatic semivariogram modeling by weighted least squares and by cross-validation

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Session 4: Pollution II (continued)		
16h45	<u>P. Bossew</u>	Probalistic spatial prediction of indoor Rn from soil air concentration
17h	<u>Y. Desnoyers</u> , J.-P. Chilès, D. Dubot, N. Jeannée, J.-M. Idasiak	Geostatistics for radiological evaluation: methodological developments and outcomes
17h15	<u>E. Dons</u> , C. Beckx, Th. Arentze, G. Wets, L. Int Panis	Shop opening hours and population exposure to NO ₂ assessed with an activity-based transportation model
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17h30	General Assembly	Building B, Room B0.004
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20h	Conference Dinner	Het Pand – Onderbergen - Gent

Wednesday 15 September 2010

<i>Chair: R. Froidevaux</i>		
9h	Keynote III: A. Bardossy	Geostatistical interpolation using copulas
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Session 1: Pollution III		
9h45	<u>L.E. Gerharz</u> , E. Pebesma	Accounting for uncertainties and change of support in spatio-temporal modelling of individual exposure to air pollution
10h	<u>D.P. Robinson</u> , C.D. Lloyd, J.M. McKinley	Applying an exhaustive secondary dataset for geostatistical analysis of air pollution at regional level
10h15	<u>A. Kolovos</u> , A. Skupin, W. Pang, G. Christakos, M. Jerrett	Spatiotemporal geostatistics in cross-methodological monitoring of air pollution
10h30	<u>U. Leopold</u> , L. Drouet, D.S. Zachary	Accounting for spatio-temporal uncertainty associated to emission allocation in an energy-air quality assessment model
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10h45	Coffee break	
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<i>Chair: I. Clark</i>		
Session 2: Health		
11h05	<u>P. Goovaerts</u>	Merging areal and point data in geostatistical interpolation: applications to soil science and medical geography
11h20	<u>L.B. Nucci</u> , A.C.C.N. Mafra, C. Stephan, L.T.O. Zangirolani, R. Cordeiro	Distribution of overweight and identification of spatial risk
11h35	<u>N.A. Samat</u> , D.F. Percy	Relative risk estimation of Dengue disease mapping based on discrete time-space stochastic Sir-Si models for disease transmission with tract-count data
11h50	<u>C. Stephan</u> , A.C.C.N. Mafra, L.B. Nucci, R. Cordeiro	Spatial risk distribution of work related accidents in southeast Brazilian city under a multinomial approach.
12h05	Y. Yano, <u>U. Mueller</u> , A. Hinwood	Generalised linear modelling of the asthma hospitalisation risk and air pollutant concentration in Perth
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12h20	Closing	
12h45	Lunch	
