



PROGRAM

7th CoDaWork 2017, 5-9 June, Abbadia San Salvatore (Siena, Tuscany, Italy)						
Time	Monday 5	Tuesday 6	Wednesday 7	Thursday 8	Friday 9	
8:30-9:00	Registration course	Registration - Opening				
9:00-10:00	Introductory Course <i>A. Buccianti J.J Egozcue J.A. Martin V. Pawlowsky</i>	General <i>K. Hron</i>	Env-1 <i>G. Monti</i>	Stats-2 <i>P. Filzmoser</i>	Social-3 <i>G. Van den Boogaart</i>	
10:00-11:00		Social-1 <i>M. Gallo</i>	Function <i>J.J. Egozcue</i>	Geo-2 <i>R. Tolosana</i>	Maths <i>A. Menafoglio</i>	
11:00-11:30	COFEE-BREAK					
11:30-12:30	Introductory Course <i>A. Buccianti J.J Egozcue J.A. Martin V. Pawlowsky</i>	Stats-1 <i>V. Pawlowsky</i>	Social-2 <i>R.S. Kenett</i>	Zero <i>G. Mateu-Figueras</i>	Omics-2 <i>J. Palarea-Albaladejo</i>	
12:30-13:30		Geo-1 <i>A. Buccianti</i>	Omics-1 <i>K. Hron</i>	Time <i>M. Templ</i>	Env-2 <i>R. Tolosana</i>	
13:30-15:00	LUNCH	LUNCH - POSTER	LUNCH - POSTER	LUNCH - POSTER	Closing - <i>J.J. Egozcue</i>	
15:00-15:50	Introductory Course <i>A. Buccianti J.J Egozcue J.A. Martin V. Pawlowsky</i>	Poster-1 <i>P. Secchi</i>	Poster-2 <i>B. Raco</i>	Poster-3 <i>M. Corongiu</i>		
15:50-16:00		move to	Excursion	move to		
16:00-17:00		Invited: <i>P. Brito J.A. Martin</i>		Excursion	Invited: <i>A. Demetriades A. Buccianti</i>	
17:00-17:30	COFEE-BREAK	COFEE-BREAK		COFEE-BREAK		
17:30-18:30	Introductory Course	Registration	CoDa-Association	Excursion & Social Dinner	Poster Award/ Hands on session <i>G. Monti</i>	
18:30-19:30						
19:30-**:**	Ice Breaker					



TUESDAY 6th June

Time	SESSION	Authors (Underline means presenting author)	Title
09:00-10:00	GEN-1	<u>J. J. Egozcue</u> , V. Pawlowsky-Glahn	Compositional data: simple questions, difficult answers
	GEN-2	<u>M. Greenacre</u>	Towards a pragmatic approach to compositional data analysis
	GEN-3	<u>J. Bacon-Shone</u> , E. Grunsky	Process identification and modelling for compositional data
10:00-11:00	SOC-1-1	<u>R. S. Kenett</u> , J.A. Martín, M. Vives-Mestres	Association rules and compositional data analysis: implications to big data
	SOC-1-2	<u>J. Morais</u> , C. Thomas-Agnan, M. Simioni	Compositional data modeling of the French automobile market: how do media investments impact brand market-shares?
	SOC-1-3	<u>B. Ferrer-Rosell</u> , G. Coenders	Tourist expenditure allocation and total expenditure in low cost and full-service carriers
11:30-12:30	STA-1-1	<u>P. Filzmoser</u> , P.Kynclova, K. Hron , C. Reimann	Symmetric Balances for Determining Pairwise Association Between Compositional Parts
	STA-1-2	<u>K. Hron</u> , P. Filzmoser, P. de Caritat, E. Fiserova, A. Gardlo	Weighted Pivot Balances: Simulations and Application to Geochemical Mapping
	STA-1-3	<u>M. Comas</u> , J.A. Martin , G. Mateu, J. Palarea	Maximum likelihood estimation for the logistic-normal-multinomial distribution
12:30-13:30	GEO-1-1	<u>A. Prior-Arce</u> , R. Tolosana, M. Verlaan, J. Bendorf	Resource Model Updating by Compositional Sequential Ensemble Filtering
	GEO-1-2	<u>N. Caciagli</u>	Use of Compositional Data Analysis and Machine Learning for Resource Estimation Support
	GEO-1-3	<u>J.C. Ordóñez-Calderón</u> , S. Gelcich, J.F. Oliveira	Applied Data Analytics on Multi-element Geochemistry for Pre-mining Characterization of Geological and Geometallurgical Attributes: Examples from the Rosemont Cu-Mo-Ag Skarn Deposit, Tucson, Arizona
Poster	P1-1	<u>A. Gardlo</u> , K. Hron	Weighted pivot balances applied to metabolomics
	P1-2	<u>B. Ferrer</u> , V. Pawlowsky, J.J. Egozcue, G. Coenders	Can Likert scales be compositional?
	P1-3	<u>C. Gozzi</u> , A. Buccianti, F. Frondini	New insights on the geochemistry of the Alpine drainage basin rivers from the CoDA perspective
	P1-4	<u>D. Quintas</u> , J. Corral-Lopez, M.I. Ortego	Spatial variability of geochemical concentrations in agricultural soil at European scale
	P1-5	<u>LaRoche, D.D.</u> , Billheimer, D., Sinari, S., Michels, K., LaFleur, B.J.	RNA-Seq as a Relative Abundance Measure: opportunities afforded by a compositional analysis framework
	P1-6	<u>D. Dumuid</u> , T.E. Stanford, J.A. Martin, T.S. Olds, L.K. Lewis, P.T. Katzmarzyk, C. Maher	The adiposity associations of reallocating physical activity, sedentary behaviour and sleep: A Compositional Data Analysis Approach
	P1-7	<u>O.F. Gulban</u> , F. De Martino	Application of Aitchison metrics on magnetic resonance imaging data with multiple contrasts at ultra high field (7 Tesla) to investigate compositional characteristics of brain tissues in living humans
	P1-8	J.R. Wu, J.M. Macklaim, B.L. Genge, <u>G. Gloor</u>	Finding the centre: corrections for asymmetry in high-throughput sequencing datasets
	P1-9	<u>G.S. Montj</u> , G. Mateu, M. I. Ortego, V. Pawlowsky, J.J. Egozcue	Modified Multivariate Kolmogorov-Smirnov Test of Goodness of Fit
	P1-10	<u>I. Erb</u> , T. Quinn, D. Lovell, C. Notredame	Differential proportionality - an alternative to differential gene expression not requiring sample normalization



WEDNESDAY 7th June

Time	SESSION	Authors (Underline means presenting author)	Title
09:00-10:00	ENV-1-1	<u>L.E. Parent</u>	Soil and plant diagnostic concepts revisited using compositional methods
	ENV-1-2	<u>J. Corral-Lopez</u> , M. I. Ortego, R. Feixa-Compte	Evolution of the composition of extreme wave storms in the Catalan coast: a Bayesian approach
	ENV-1-3	<u>A. Speranza</u> , R. Caggiano, S. Margiotta, V. Summa	Compositional data analysis of element concentrations of simultaneous sizesegregated PM measurements
10:00-11:00	FUN-1	<u>R. Talska</u> , A. Menafoglio, K. Hron, J. Machalova, E. Fiserova	Functional linear regression models with distributional response
	FUN-2	<u>J. Machalová</u> , K. Hron, R. Talská, A. Menafoglio	Simplicial splines for representation of density functions
	FUN-3	<u>A. Menafoglio</u> , M. Grasso, P. Secchi, B. M. Colosimo	A Bayes Space Approach to Profile Monitoring of Probability Density Functions for Image Data
11:30-12:30	SOC-2-1	<u>S.Y. Coleman</u>	Analysing activities in a classroom – Remembrances of John Aitchison in Hong Kong with applications to a Service Provider
	SOC-2-2	<u>M.I. Ortego</u> , A. Perez-Foguet, R. Gine-Garriga	Construction of an aggregated indicator of access to water: A compositional point of view
	SOC-2-3	<u>S.H. Kim</u> , N.R. Strenger, N. Lee	Latent Dimensions of Religiousness and Spirituality: A Longitudinal Correlated Topic Model
12:30-13:30	OMI-1-1	<u>J. Rivera-Pinto</u> , V. Pawlowsky, J.J. Egozcue, R. Paredes, M. Noguera-Julian, M. Luz Calle	Balance selection in microbiome studies
	OMI-1-2	<u>J.T. Morton</u> , J. Sanders, R.A. Quinn, D. McDonald, A. Gonzalez, Y. Vázquez-Baeza, J.A. Navas-Molina, S.J. Song, J.L. Metcalf, E.R. Hyde, M. Lladser, P.C. Dorrestein, R. Knight	Balance trees reveal microbial niche differentiation
	OMI-1-3	<u>A. Washburne</u>	Open Challenges in the Phylogenetic Factorization of Compositional Data
Poster	P2-1	<u>I. Galvan-Femenia</u> , J. Graffelman, C. Barcelo-i-Vidal, L.Sumoy, V. Moreno, R. de Cid	Multidimensional scaling for relatedness research: an application of the Aitchison distance
	P2-2	<u>T.C. Leung</u> , J. Bacon-Shone	Modelling censored compositional data in the correct censored space
	P2-3	<u>J. Rendlova</u> , K. Facevicova, K. Hron, P. Filzmoser	Robust Principal Component Analysis for Compositional Tables
	P2-4	<u>J.D. Silverman</u> , J. Smith	Compositional challenges in the analysis of flow cytometry cell count data
	P2-5	J. D. Silverman, <u>A. Washburne</u> , S. Mukherjee, L.A. David	A phylogenetic isometric log-ratio transforms for analysis of microbiota survey data
	P2-6	<u>M. Grifoll</u> , M.I. Ortego	Characterization of the container ow evolution in a multi-gateway port system using compositional data
	P2-7	<u>N. Gupta</u> , S.E. Mathiassen, M. Heiden, D. Hallman, M.B. Jørgensen, A Holtermann	Gender differences in time spent sedentary and in physical activity during leisure: A comparison of data analyzed using a traditional approach and compositional data analysis
	P2-8	<u>N. Štefelová</u> , A. Alfons, J. Palarea, P. Filzmoser, K. Hron	Robust regression with compositional covariates in the presence of cellwise contamination
	P2-9	<u>P. Roeser</u> , M.-P.Ledru, N. Thouveny, K. Tachikawa, F. Rostek, M. Garcia, U. Struck, A. Sawakuchi, C. Favier, E. Bard	Deposition modes in the peatland and paleo-lake Colônia (São Paulo, SE / Brazil) since the last interglacial based on clr-biplots and principal component analysis of sediment geochemistry data
	P2-10	<u>N.J. le Roux</u> , B.W. Gurr	A Biplot View of Violent Crime in South Africa
	P2-11	<u>N.G. Cadigan</u>	Compositional Likelihoods in State-Space Fish Stock Assessment Models



THURSDAY 8th June

Time	SESSION	Authors (Underline means presenting author)	Title
09:00-10:00	STA-2-1	<u>M. Graf</u>	A distribution on the simplex of the Generalized Beta type
	STA-2-2	<u>K. G. van den Boogaart</u> , R. Tolosana-Delgado	Compositional Non-parametric Tests
	STA-2-3	<u>R. Tolosana-Delgado</u> , K. G. van den Boogaart	Compositional Non-parametric Regression
10:00-11:00	GEO-2-1	<u>E.C. Grunsky</u> , J. M. McKinley, U.A. Mueller	Classification and Prediction of Lithologic Assemblages based on Soil Geochemistry and Geospatial Relationships
	GEO-2-2	M.A. Engle, A. Buccianti, <u>R. Olea</u> , M.S. Blondes	Merging key concepts in the chemistry of natural waters with compositional data analysis
	GEO-2-3	<u>M.S. Blondes</u> , W.H. Craddock, J.L. Shelton, M.A. Engle	Characterization of Crustal Gas Systems using Compositional Data Analysis of Noble Gas Isotopes and Gas Compositions
11:30-12:30	ZER-1	<u>J. Bear</u> , D. Billheimer	Zeros and Subcompositionally Coherent Estimators
	ZER-2	<u>M. Templ</u> , K. Hron, P. Filzmoser	Exploring outliers in compositional data with structural zeros
	ZER-3	<u>J. Palarea</u> , J.A. Martín, S. F. M. Chastin	Some proposals to investigate zero patterns in compositional data sets
12:30-13:30	TIM-1	<u>J. Bergman</u>	Compositional time series with varying number of parts
	TIM-2	<u>P. Hingley</u>	Forecasting patent filings at the European Patent Office (EPO) using compositional data analysis techniques
	TIM-3	<u>S. Kjærsgaard</u> , J. Oeppen, M.-P. Bergeron Boucher, R. Lindahl-Jacobsen	Longevity forecasting by socio-economic groups using compositional data analysis
Poster	P3-1	<u>N. Perujo</u> , A.M. Romani, J.A. Martín	Functional diversity in a Mediterranean river: a new analysis of Carbon substrate utilization profiles through compositional methodology
	P3-2	<u>R. Tolosana-Delgado</u> , K.G. van den Boogaart, J. McKinley	Towards compositional multifractal analysis
	P3-3	<u>R. Ortells</u> , J.J. Egozcue, M.I. Ortego, and A. Garola	Time series analysis on a commodity price vector: a compositional approach
	P3-4	<u>R.A. Valls Álvarez</u> , J.C. Martín, V. Galkine, R. Rodriguez Álvarez	Application of CoDa analysis in the mining-exploration industry
	P3-5	<u>V. Pawlowsky-Glahn</u> , J.J. Egozcue, M. Planes-Pedra	Survey data as compositional tables
	P3-6	<u>V.M.E. Edjabou</u> , J.A. Martín, A. Boldrin, T.F. Astrup	Compositional data analysis of household waste recycling centres in Denmark
	P3-7	<u>X.C Liu</u> , W.L. Wang, and Y.R. Pei	Compositional data analysis on the the stream sediment geochemical data at the Duolong mineral district, Tibet, China
	P3-8	<u>T. Yoshida</u> , R. Er-Rbib, M. Tsutsumi	The epitome of the future world from the perspective of demographic composition
	P3-9	<u>Z. Ziembik</u> , A. Dołhańczuk-Śródka, T. Majcherczyk	Analysis of gamma radioactive isotopes content in surface soil layers near Longyearbyen, Spitsbergen
	P3-10	<u>G.B. Gloor</u> , G. Bian, A. Gong, C. Jia, W. Zhang, J. Hu, H. Zhang, Y. Zhang, Z. Zhou, J. Zhang, J.P. Burton, G. Reid, Y. Xiao, Q. Zeng, K. Yang, J. Li	The gut microbiota of healthy aged Chinese is similar to the healthy young



FRIDAY 9th June

Time	SESSION	Authors (Underline means presenting author)	Title
09:00-10:00	SOC-3-1	<u>V. Simonacci</u> , M.A. Di Palma, and M. Gallo	Italian Welfare Expenditures: a compositional analysis in a three-way perspective
	SOC-3-2	<u>C.P. Rincon</u> , A.F. Ortiz	Plebiscite for peace in Colombia: Statistical analysis using compositional data
	SOC-3-2	<u>E. Fiserova</u> , I. Muller, K. Hron	Compositional Regression and Its Interpretation
10:00-11:00	MAT-1	<u>G. Pistone</u> , L. Malago, M.-P. Rogantin	Gradient flow on the simplex
	MAT-2	<u>K. Fačevićová</u> , J. J. Egozcue, K. Hron	Compositional properties of Sudoku tables
	MAT-3	<u>S. Sinari</u> , D. Billheimer, E.J. Bedrick	Subcompositional coherence and the compositional complex
11:30-12:30	OMI-2-1	<u>G. Mateu</u> , P. Daunis-i-Estadella, M. Lopez-Siles, J.A. Martín	Dissimilarity measures to characterize compositions of microbial communities
	OMI-2-2	<u>J. Walach</u> , P. Filzmoser, K. Hron, B. Walczak, L. Najdekr	A robust pairwise log-ratio approach for variable selection and cell-wise outlier diagnostics with focus on metabolomic data
	OMI-2-3	<u>J.D. Silverman</u> , S. Mukherjee, L.A. David, V. Pawlowsky, J.J. Egozcue	Modeling time evolution and therapeutic effect in human microbiota
12:30-13:30	ENV-2-1	<u>T. Yoshida</u> , M. Tsutsu	Spatial regression model for compositional data in discrete space with spatial auto-correlation and spatial cross-correlation
	ENV-2-2	<u>M.A. Aquino-Lopez</u> , J.A. Christen, M. Blaauw, J. McKinley	Reconstructing past environments using compositional fossil data
	ENV-2-3	<u>G.S. Monti</u> , S. Migliorati	Compositional approach to the analysis of species abundance data
13:30	CLOSING	<u>A. Buccianti</u> , J.A. Martín	Closing CoDaWork 2017