

# PAOLO GIORDANI

## Curriculum Vitae

Place Rome

Date February 5, 2018

### Part I – General Information

Full Name	Paolo Giordani
Date of Birth	September 18, 1976
Place of Birth	Rome
Citizenship	Italian
PermanentAddress	Department of Statistical Sciences Sapienza University of Rome P.le Aldo Moro, 5, 00185 Rome, Italy
Phone Number	+39 064991 0504
E-mail	paolo.giordani@uniroma1.it
Spoken Languages	Italian, English

### Part II – Education

Type	Year	Institution	Notes (Degree, Experience,...)
B.A.	2000	Faculty of Statistical Sciences, Sapienza University of Rome	Laurea in Statistical and Economical Sciences (110/110 cum laude); Thesis: “Modelli esplorativi ed inferenziali per l’analisi fattoriale a tre vie”; Advisor: Prof. R. Coppi.
PhD	2004	Department of Statistics, Probability and Applied Statistics, Sapienza University of Rome	Ph.D. in Statistical Methodology; Thesis: “Least-squares and possibilistic approaches to latent component models for interval valued and fuzzy data”

### Part III – Appointments

#### IIIA – Academic Appointments

Start	End	Institution	Position
2015		Department of Statistical Sciences, Sapienza University of Rome	Associate Professor in Statistics
2008	2015	Department of Statistical Sciences, Sapienza University of Rome	Assistant Professor in Statistics
2004	2008	Department of Statistics, Probability and Applied Statistics, Sapienza	Post-doc in Statistics

		University of Rome	
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### IIIB – Other Appointments

Start	End	Institution	Position
2016	2016	Conference SMPS 2016	Co-chair
2015	2015	Meeting FIRB 2015	Chair
2006	2012	Metron	Member of the Editorial Staff
2006		Conference proceedings (Compstat 2006; FUZZ-IEEE 2007; CLADAG 2009; SMPS 2010; Compstat 2012; SMPS 2012; SIS 2014; SMPS 2016; CLADAG 2017)	Referee
2004		Journals (Advances in Data Analysis and Classification; Analytical Letters; Chemometrics and Intelligent Laboratory Systems; Communications in Statistics – Theory and Methods; Computational Statistics and Data Analysis; European Journal of Operational Research; Fuzzy Sets and Systems; Information Sciences, IEEE Transactions on Fuzzy Systems; International Journal of Machine Learning and Cybernetics; International Journal of Uncertainty, Fuzziness and Knowledge-Based Systems; Journal of Chemometrics; Journal of Classification; Journal of Environmental Engineering; Journal of Intelligent and Fuzzy Systems; Journal of Multiple-Valued Logic and Soft Computing; Journal of Statistical Software; Journal of Statistical Computation and Simulation; Neurocomputing; Pattern Recognition Letters; Psychometrika; Quality Technology and Quantitative Management; SIAM Journal on Matrix Analysis and Applications; Soft Computing; Statistica; Statistica Applicata; Statistics; Technometrics)	Referee
2006	2006	Meeting Compstat 2006	Member of the Local Organizing Committee
2001	2002	University of Groningen (Groningen, Holland).	Visiting student (Supervisor: Prof. H.A.L. Kiers)

## Part IV – Teaching experience

Year	Institution	Lecture/Course
2017/18	Eastern Africa Statistical Training Centre, Dar Es Salaam, Tanzania	Advanced multivariate methods for complex data structures
2017/18	Department of Statistical Sciences, Sapienza University of Rome	Metodi Statistici per la Finanza e le Assicurazioni
2017/18 2016/17	Department of Statistical Sciences, Sapienza University of Rome	Multivariate Statistics
2016/17	Ph.D. Course in Statistical Methodology, Department of Statistical Sciences, Sapienza University of Rome	Metodi tensoriali e tecniche di ottimizzazione di funzioni matriciali
2016/17- 2012/13	Department of Statistical Sciences, Sapienza University of Rome	Metodologia Statistica Avanzata
2011/12	Department of Statistical Sciences, Sapienza University of Rome	Analisi delle strutture complesse
2013/14- 2011/12	Faculty of Engineering, Informatics and Statistics, Faculty of Medicine, Sapienza University of Rome	Corso di Alta Formazione Interfacoltà in Metodi Statistici per la Ricerca e la Pratica Biomedica
2009/10	Faculty of Statistical Sciences, Sapienza University of Rome	Analisi delle strutture complesse
2009/10	Ph.D. Course in Statistical Methodology, Department of Statistics, Probability and Applied Statistics, Sapienza University of Rome	Introduzione all'analisi multiway
2010/11 2008/09	Faculty of Statistical Sciences, Faculty of Medicine, Sapienza University of Rome	Corso di Alta Formazione Interfacoltà in Metodi Statistici per la Ricerca e la Pratica Biomedica
2008/09	Faculty of Statistical Sciences, Sapienza University of Rome	Analisi delle strutture complesse
2007/08	Faculty of Statistical Sciences, Sapienza University of Rome	Introduzione all'utilizzo di R
2007/08	Faculty of Statistical Sciences, Sapienza University of Rome	Analisi delle strutture complesse dei dati – II modulo
2006/07	Ph.D. in Innovation and Education Systems Assessment, Department of Education, University of Roma Tre	Corso Introduttivo all'Analisi Statistica dei Dati per Dottorandi e Giovani Ricercatori del DSE
2006/07	Ph.D. in Innovation and Education Systems Assessment, Department of Education, University of Roma Tre	Introduzione all'Analisi Fattoriale Qualitativa e ai Metodi di Classificazione
2005/06 2004/05	Faculty of Agriculture, University of Molise	Statistica per la Ricerca (3 CFU)
2005/06- 2003/04	Faculty of Agriculture, University of Molise	Elementi di Statistica (4 CFU)

## Part V - Society memberships, Awards and Honors

Year	Title
2000	Laurea award “Giuseppe Leti e Maria Passaquindici”, Faculty of Statistical Sciences, Sapienza University of Rome
2007-	SIS-Cladag group, member
2012-2017	TRICAP Scientific Committee
2013-	Italian Statistical Society, member

## Part VI - Funding Information [grants as PI-principal investigator or I-investigator]

Year	Title	Program	Grant value (€)
2017	I	Universitarie 2017 “Latent Variable Models for Complex Data Structures”	25,000
2016	PI	Universitarie 2016 “Latent Variable Models for Complex Data Structures”	33,600
2015	I	Universitarie 2015 “Latent Variable Models for Complex Data Structures, with a focus on Categorical Responses”	31,631
2014	I	Universitarie 2014 “Metodi di biclustering con approccio fuzzy”	6,000
2013	PI	Universitarie 2013 “Indici classici di disuguaglianza e variabilità: nuove prospettive di ricerca”	7,000
2012	local unit PI	FIRB Futuro in Ricerca 2012 “Modelli mistura e a variabili latenti per l'inferenza causale e l'analisi di dati socio-economici”	local unit 237,861 total 913,581
2012	I	PRIN 2010-2011 “Multivariate statistical models for risk assessment”	total 624,607
2012	I	Universitarie 2012 “Nuove metodologie multivariate per l'analisi di struttura latente per dati a tre vie e longitudinali”	9,000
2011	PI	Universitarie 2011 “Metodi di clustering per dati multivariati misti”	8,500
2010	PI	Universitarie 2010 “Modelli di gestione dell'incertezza nell'analisi di dati osservazionali e sperimentali”	5,000
2009	PI	Universitarie 2009 “Metodi e modelli statistici per l'analisi di traiettorie multivariate”	13,750
2008	I	Universitarie 2008 “Aspetti metodologici e analisi empiriche in indagini a struttura complessa in presenza di informazioni parziali”	
2008	I	Nuova Iniziativa di Ricerca di Ateneo Federato 2008 “Modelli e metodi statistici per l'analisi di dati microarray longitudinali”	
2008	I	Ateneo Federato 2008 “Metodologie e tecniche per la	

		riduzione dimensionale di dati statistici con struttura complessa”	
2007	I	Ateneo Federato 2007 “Fuzzy tools for the statistical analysis of real- and fuzzy-valued data”	
2005	I	PRIN 2005 “Valutazione e gestione dell'incertezza nell'analisi dei dati”	
2003	I	Ateneo 2003 “Metodologie multivariate per l'analisi statistica di profili di espressione genica”	
2002	I	Facoltà 2002 “Sviluppo dell'approccio “fuzzy” all'analisi dei dati”	

## Part VII – Research Activities

Keywords                      Brief Description

Component models	My research activity is mainly devoted to theoretical developments of multivariate methods (latent component models, clustering algorithms, regression) for data with complex structure, i.e., multiway data and/or imprecise data (interval-valued and/or fuzzy-valued). Such methods are applied to real data in different fields.
Clustering algorithms	
Regression	
Multiway data	
Fuzzy and interval data	

## Part VIII – Summary of Scientific Achievements

Product type	Number	Data Base	Start	End
Papers [international]	34	Google scholar	2003	2018
	33	Scopus	2004	2018
Books [scientific]*	17	Google scholar	2003	2018
	9	Scopus	2004	2018

\*Book chapters

Total Impact factor (values 2016)	85.567
Total Citations	845 (Google scholar) 361 (Scopus)
Average Citations per Product	10.69 (Google scholar) 8.80 (Scopus)
Hirsch (H) index	16 (Google scholar) 12 (Scopus)
Normalized H index*	1.00 (Google scholar) 0.80 (Scopus)

\*H index divided by the academic seniority.

## Part IX–Publications

### - International journals

35. Giordani, P., Kiers, H.A.L., (2018) A review of tensor-based methods and their application to hospital care data, *Statistics in Medicine* (ISSN: 1097-0258), 37, 137-156, doi: 10.1002/sim.7514.
34. Bartolucci, F., Giordani, P., (2017) Editorial: Special section on latent variable models for longitudinal data. *Biometrical Journal* (ISSN: 1521-4036), 59, 781-782, doi: 10.1002/bimj.201700041.
33. Ferraro, M.B., Giordani, P., (2017) Possibilistic and fuzzy clustering methods for robust analysis of non-precise data. *International Journal of Approximate Reasoning* (ISSN: 1873-4731), 88, 23–38, doi: 10.1016/j.ijar.2017.05.002.
32. Giordani, P., Rocci, R., (2017) Some clarifications of remedies for Candecomp/Parafac degeneracy by means of an SVD-penalized approach. *Chemometrics and Intelligent Laboratory Systems* (ISSN: 0169-7439), 162, 172-181, doi: 10.1016/j.chemolab.2017.01.011.
31. Giordani, P., Ramos-Guajardo, A.B., (2016) A fuzzy clustering procedure for random fuzzy sets, *Fuzzy Sets and Systems* (ISSN: 0165-0114), 305, 54-69, doi: 10.1016/j.fss.2016.02.006.
30. De Roover, K., Ceulemans, E., Giordani, P., (2016) Overlapping clusterwise simultaneous component analysis, *Chemometrics and Intelligent Laboratory Systems* (ISSN: 0169-7439), 156, 249-259, doi: 10.1016/j.chemolab.2016.05.002.
29. Mastroilli, C., Tripodi, S., Caffarelli, C., Perna, S., Di Rienzo-Busino, A., Sfika, I., Asero, R., Dondi, A., Bianchi, A., Povesi Dascola, C., Ricci, G., Cipriani, F., Maiello, N., Miraglia Del Giudice, M., Frediani, T., Frediani, S., Macrì, F., Pistoletti, C., Dello Iacono, I., Patria, M.F., Varin, E., Peroni, D., Comberiati, P., Chini, L., Moschese, V., Lucarelli, S., Bernardini, R., Pingitore, G., Pelosi, U., Olcese, R., Moretti, M., Cirisano, A., Faggian, D., Travaglini, A., Plebani, M., Verga, M.C., Calvani, M., Giordani, P., Matricardi, P.M., (2016) Endotypes of pollen-food syndrome in children with seasonal allergic rhinoconjunctivitis: a molecular classification, *Allergy* (ISSN: 1398-9995), 71, 1181-1191, doi: 10.1111/all.12888.
28. Ferraro, M.B., Giordani, P., (2015) A toolbox for fuzzy clustering using the R programming language, *Fuzzy Sets and Systems* (ISSN: 0165-0114), 279, 1-16, doi: 10.1016/j.fss.2015.05.001.
27. Giordani, P., (2015) Linear regression analysis for interval-valued data based on the Lasso technique, *Advances in Data Analysis and Classification* (ISSN: 1862-5347), 9, 5-19, doi: 10.1007/s11634-014-0164-8.
26. Pizzulli, A., Perna, S., Florack, J., Pizzulli, A., Giordani, P., Tripodi, S., Pelosi S., Matricardi, P.M., (2014) The impact of tele-monitoring on adherence to nasal corticosteroid treatment in children with seasonal allergic rhinoconjunctivitis, *Clinical and Experimental Allergy* (ISSN: 1365-2222), 44, 1246-1254, doi: 10.1111/cea.12386.
25. Giordani, P., Kiers, H.A.L., Del Ferraro, M.A., (2014) Three-way component analysis using the R package ThreeWay, *Journal of Statistical Software* (ISSN: 1548-7660), 57 (7), 1-23, URL <http://www.jstatsoft.org/v57/i07/>.
24. Giordani, P., Rocci, R., (2013) Candecomp/Parafac with ridge regularization, *Chemometrics and Intelligent Laboratory Systems* (ISSN: 0169-7439), 129, 3-9, doi: 10.1016/j.chemolab.2013.08.002.
23. Colasante, E., Gori, M., Bastiani, L., Siciliano, V., Giordani, P., Grassi, M., Molinaro, S., (2013) An assessment of the psychometric properties of Italian version of CPGI, *Journal of Gambling Studies* (ISSN: 1050-5350), 29, 765–774, doi: 10.1007/s10899-012-9331-z.
22. Ferraro, M.B., Giordani, P., (2013) On possibilistic clustering with repulsion constraints for imprecise data, *Information Sciences* (ISSN: 0020-0255), 245, 63-75, doi: 10.1016/j.ins.2013.04.008.
21. Giordani, P., Rocci, R., (2013) Constrained Candecomp/Parafac via the Lasso, *Psychometrika* (ISSN: 0033-3123), 78, 669-684, doi: 10.1007/S11336-013-9321-9.
20. Ferraro, M.B., Giordani, P., (2012) A multiple linear regression model for imprecise information, *Metrika* (ISSN: 0026-1335), 75, 1049-1068, doi: 10.1007/s00184-011-0367-3.
19. Giordani, P., Kiers, H.A.L., (2012) FINDCLUS: Fuzzy INdividual Differences CLUstering, *Journal of Classification* (ISSN: 0176-4268), 29, 170-198, doi: 10.1007/s00357-012-9109-0.
18. Coppi, R., D’Urso, P., Giordani, P., (2012) Fuzzy and possibilistic clustering for fuzzy data, *Computational Statistics and Data Analysis* (ISSN: 0167-9473), 56, 915-927, doi: 10.1016/j.csda.2010.09.013.

17. Coppi, R., D'Urso, P., Giordani, P., (2010) A class of fuzzy clustering models for multivariate spatial time series, *Journal of Classification* (ISSN: 0176-4268), 27, 54-88, doi: 10.1007/s00357-010-9043-y.
16. Giordani, P., Giorgi, G.M., (2010) A fuzzy logic approach to poverty analysis based on the Gini and Bonferroni inequality indices, *Statistical Methods and Applications* (ISSN: 1618-2510), 19, 587-607, doi: 10.1007/s10260-010-0146-8.
15. Rocci, R., Giordani, P., (2010) A weak degeneracy revealing decomposition for the Candecomp/Parafac model, *Journal of Chemometrics* (ISSN: 0886-9383), 24, 57-66, doi: 10.1002/cem.1272.
14. Giordani, P., (2010) Three-way analysis of imprecise data, *Journal of Multivariate Analysis* (ISSN: 0047-259X), 101, 568-582, doi: 10.1016/j.jmva.2009.10.003.
13. Giordani, P., Kiers, H.A.L., (2007) Principal component analysis with boundary constraints, *Journal of Chemometrics* (ISSN: 0886-9383), 21, 547-556, doi: 10.1002/cem.1074.
12. Coppi, R., D'Urso, P., Giordani, P., Santoro, A., (2006) Least squares estimation of a linear regression model with LR fuzzy response, *Computational Statistics and Data Analysis* (ISSN: 0167-9473), 51, 267-286, doi: 10.1016/j.csda.2006.04.036.
11. Coppi, R., Giordani, P., D'Urso, P., (2006) Component models for fuzzy data, *Psychometrika* (ISSN: 0033-3123), 71, 733-761, doi: 10.1007/s11336-003-1105-1.
10. D'Urso, P., Giordani, P., (2006) A robust fuzzy k-means clustering model for interval valued data, *Computational Statistics* (ISSN: 0943-4062), 21, 251-269, doi: 10.1007/s00180-006-0262-y.
9. D'Urso, P., Giordani, P., (2006) A weighted fuzzy c-means clustering model for symmetric fuzzy data, *Computational Statistics and Data Analysis* (ISSN: 0167-9473), 50, 1496-1523, doi: 10.1016/j.csda.2004.12.002.
8. Giordani, P., (2006) Two- and three-way component models for LR fuzzy data in a possibilistic framework, *Fuzzy Sets and Systems* (ISSN: 0165-0114), 157, 2648-2664, doi: 10.1016/j.fss.2004.12.012.
7. Giordani, P., (2006) Review of A. Lemmi and G. Betti (Eds.), *Fuzzy set approach to multidimensional poverty measurement*, Springer, 2006, pp. 279 + xv, *Metron* (ISSN: 0026-1424), 64, 411-414.
6. Giordani, P., Kiers, H.A.L., (2006) A comparison of three methods for principal component analysis of fuzzy interval data, *Computational Statistics and Data Analysis* (ISSN: 0167-9473), 51, 379-397, doi: 10.1016/j.csda.2006.02.019.
5. D'Urso, P., Giordani, P., (2005) A possibilistic approach to latent component analysis for symmetric fuzzy data, *Fuzzy Sets and Systems* (ISSN: 0165-0114), 150, 285-305, doi: 10.1016/j.fss.2004.03.024.
4. D'Urso, P., Giordani, P., (2004) A least squares approach to principal component analysis for interval valued data, *Chemometrics and Intelligent Laboratory Systems* (ISSN: 0169-7439), 70, 179-192, doi: 10.1016/j.chemolab.2003.11.005.
3. Giordani, P., Kiers, H.A.L., (2004) Three-way component analysis of interval valued data, *Journal of Chemometrics* (ISSN: 0886-9383), 18, 253-264, doi: 10.1002/cem.868.
2. Giordani, P., Kiers, H.A.L., (2004) Principal Component Analysis of symmetric fuzzy data, *Computational Statistics and Data Analysis* (ISSN: 0167-9473), 45, 519-548, doi: 10.1016/S0167-9473(02)00352-3.
1. D'Urso, P., Giordani, P., (2003) Fitting of fuzzy linear regression models with multivariate response, *International Mathematical Journal* (ISSN: 1311-6797), 3, 655-664.

- Book editor

1. Ferraro, M.B., Giordani, P., Vantaggi, B., Gagolewski, M., Gil, M. Á., Grzegorzewski, P., Hryniewicz, O. (Eds.) (2017) *Soft Methods for Data Science, Advances in Intelligent Systems and Computing*, Vol. 456, Springer International Publishing, Switzerland, ISBN: 978-3-319-42972-4, doi: 10.1007/978-3-319-42972-4.

- Book chapters

14. Giordani, P., Rocci, R., (2016) Remedies for degeneracy in Candecomp/Parafac, in: van der Ark, L.A., Bolt, D.M., Wang, W.-C., Douglas, J.A., & Wiberg, M. (Eds.): *Quantitative Psychology Research: The 80th Annual Meeting of the Psychometric Society, Beijing, 2015*, Springer International Publishing, Switzerland, pp. 213-227, ISBN: 978-3-319-38757-4 doi: 10.1007/978-3-319-38759-8-16.

13. Coppi, R., Giordani, P., (2014) Contributions of Italian statisticians to the development of multivariate data analysis, in: Crescenzi, F., Mignani, S., (Eds.): *Statistical Methods and Applications from a Historical Perspective*, Springer International Publishing Switzerland, pp. 15-25, ISBN 978-3-319-05551-0, doi: 10.1007/978-3-319-05552-7.
12. Giordani, P., (2014) Principal Component Analysis, in: Alhajj, R., Rokne, J., (Eds.): *Encyclopedia of Social Network Analysis and Mining*, Springer, Berlin, pp. 1319-1331, ISBN 978-1-4614-6169-2.
11. Coppi, R., Ferraro, M.B, Giordani, P., (2013) A class of linear regression models for imprecise random elements, in Torelli, N., Pesarin, F., Bar-Hen, A., (Eds.): *Advances in Theoretical and Applied Statistics*, Springer-Verlag Berlin Heidelberg, pp. 211-220, ISBN 978-3-642-35587-5, doi: 10.1007/978-3-642-35588-2 20.
10. Ferraro, M.B., Giordani, P., (2013) A proposal of robust regression for random fuzzy sets, in Kruse, R., Berthold, M.R., Moewes, C., Gil, M.A., Grzegorzewski, P., Hryniewicz, O., (Eds.): *Synergies of Soft Computing and Statistics for Intelligent Data Analysis*, Springer Verlag, Berlin, pp. 115-123, ISBN: 978-3-642-33042-1, doi: 10.1007/978-3-642-33042-1.
9. Blanco-Fernández, A., Casals, R.M., Colubi, A., Coppi, R., Corral, N., de la Rosa de Sáa, S., D'Urso, P., Ferraro, M.B., García-Bárcana, M., Gil, M.A., Giordani, P., González-Rodríguez, G., López, M.T., Lubiano, M.A., Montenegro, M., Nakama, T., Ramos-Guajardo, A.B., Sinova, B., Trutschnig, W. (2013). Arithmetic and distance-based approach to the statistical analysis of imprecisely valued data, in: Borgelt, C., Gil, M.A., Sousa, J.M.C., Verleysen, M., (Eds.) *Towards Advanced Data Analysis by Combining Soft Computing and Statistics. Studies in Fuzziness and Soft Computing*, Springer Verlag, Berlin Heidelberg, Vol. 285, pp. 1-18, ISBN: 978-3-642-30277-0, doi: 10.1007/978-3-642-30278-7\_1.
8. Ferraro, M.B., Colubi, A., Giordani, P., (2010) A linearity test for a simple regression model with LR fuzzy response, in: Borgelt, C., González-Rodríguez, G., Trutschnig, W., Lubiano M.A., Gil, M.A., Grzegorzewski, P., Hryniewicz, O., (Eds.): *Combining Soft Computing and Statistical Methods in Data Analysis*, Springer Verlag, Berlin, pp. 263-271, ISBN: 978-3-642-14745-6.
7. Coppi, R., D'Urso, P., Giordani, P., (2006) Fuzzy K-medoids clustering models for fuzzy multivariate time trajectories, in Rizzi, A., Vichi, M., (Eds.): *Proceedings in Computational Statistics 2006*, Physica-Verlag, New York, pp. 17-29, ISBN: 3-7908-1708-2.
6. Coppi, R., Giordani, P., (2006) La ripartizione delle spese in conto capitale per fonti di finanziamento: utilizzo di modelli "fuzzy" in presenza di incertezza delle informazioni, in Barca, F., Cappiello, F., Ravoni, L., Volpe, M., (Eds.): *Federalismo, equità, sviluppo - I risultati delle politiche pubbliche analizzati e misurati dai Conti Pubblici Territoriali*, Il Mulino, Bologna, pp. 389-408, ISBN: 9788815114853.
5. González-Rodríguez, G., Colubi, A., Coppi, R., Giordani, P., (2006) On the estimation of linear models with interval-valued data, in Rizzi, A., Vichi, M., (Eds.): *Proceedings in Computational Statistics 2006*, Physica-Verlag, New York, pp. 697-704, ISBN: 3-7908-1708-2.
4. González-Rodríguez, G., Colubi, A., D'Urso, P., Giordani, P., (2006) An asymptotic test for symmetry of random variables based on fuzzy tools, in Lawry, J., Miranda, E., Bugarin, A., Li, S., Gil, M.A., Grzegorzewski, P., Hryniewicz, O., (Eds.): *Soft Methods for Integrated Uncertainty Modelling*, Springer Verlag, Berlin, pp. 87-94, ISBN: 978-3-540-34776-7.
3. Coppi, R., D'Urso, P., Giordani, P., (2006) Fuzzy C-medoids clustering models for time-varying data, in Bouchon-Meunier, B., Coletti G., Yager, R.R., (Eds.): *Modern Information Processing: From Theory to Applications*, Elsevier, Amsterdam, pp. 195-206, ISBN: 978-0-444-52075-3.
2. Coppi, R., D'Urso, P., Giordani, P., (2004) Informational paradigm and entropy-based dynamic clustering in a complete fuzzy framework, in López-Díaz, M., Gil, M.A., Grzegorzewski, P., Hryniewicz, O., Lawry, T., (Eds.): *Soft Methodology and Random Information Systems*, Springer Verlag, Berlin, pp. 463-470, ISBN: 978-3-540-22264-4.
1. Giordani, P., (2003) Principal component analysis of Boolean symbolic objects, in Schader, M., Gaul, W., Vichi, M., (Eds.): *Between Data Science And Applied Data Analysis*, Springer Verlag, Berlin, pp. 218-225, ISBN: 3-540-40354-X.

- Proceedings



15. Ferraro, M.B., Giordani, P., (2016) Fuzzy and possibilistic approach to clustering of imprecise data, Proceedings of the 48th scientific meeting of the Italian Statistical Society, Salerno, ISBN: 9788861970618.
14. Alfò, M., Giordani, P., (2015) Finite Mixture Models for Mixed Data: EM Algorithms and Parafac Representations, Book of Abstracts CLADAG 2015, CUEC, Cagliari, ISBN: 9788884679499.
13. Giordani, P., (2015) Estimation procedures for avoiding degenerate solutions in CANDECOMP/PARAFAC, Book of Abstracts CLADAG 2015, CUEC, Cagliari, ISBN: 9788884679499.
12. Ferraro, M.B., Giordani, P., (2014) fclust: an R package for fuzzy clustering, Proceedings of SIS 2014, CUEC, Cagliari, ISBN: 978-88-8467-874-4.
11. Giordani, P., (2014) Finite mixtures for multivariate mixed data: a Parafac-based approach, Proceedings of SIS 2014, CUEC, Cagliari, ISBN: 978-88-8467-874-4.
10. Giordani, P., Kiers, H.A.L., Del Ferraro, M.A., (2013) The R package ThreeWay, Proceedings of CLADAG 2013, CLEUP, ISBN: 9788867871179.
9. Ferraro, M.B., Giordani, P., (2013) A new fuzzy clustering algorithm with entropy regularization, Proceedings of CLADAG 2013, CLEUP, ISBN: 9788867871179.
8. Coppi, R., Giordani, P., (2011) Contributions of Italian statisticians to the development of multivariate data analysis, Proceedings of SIS 2011, in: Quaderni di Dipartimento di Scienze Statistiche, Università di Bologna, Bologna, ISSN: 1973-9346.
7. Coppi, R., Ferraro, M.B, Giordani, P., (2010) A class of linear regression models for imprecise random elements, Proceedings of SIS 2010, Cleup, Padova, ISBN: 978-8-861-29566-7.
6. Giordani, P., Giorgi, G.M., (2010) Poverty measures in a fuzzy logic framework, Proceedings of SIS 2010, Cleup, Padova, ISBN: 978-8-861-29566-7.
5. Coppi, R., D'Urso, P., Giordani, P., (2007) Fuzzy clustering for space-time series using spatial autocorrelation information, in: Proceedings of the 2007 International Conference on Fuzzy Systems, IEEE Computational Intelligence Society, Piscataway, pp. 1438-1443, ISBN: 1-424-41210-2.
4. Giordani, P., Kiers, H.A.L., (2005) Three-way models for interval valued data, Book of short papers CLADAG 2005, MUP, Parma, 365-368.
3. Coppi, R., D'Urso, P., Giordani, P., (2003) Data reduction models for interval valued observations, Book of short papers CLADAG 2003, CLUEB, Bologna, 119-122.
2. D'Urso, P., Giordani, P., (2003) Principal component analysis for LR fuzzy data, Book of short papers SIS 2003, Università di Napoli "Federico II", Napoli.
1. Giordani, P., (2001) Three mode factor analysis: an algorithm to simplify the core matrix, Book of short papers CLADAG 2001, Università di Palermo, Palermo, 121-124.

## Part XI– Conference talks

28. Tensor-based methods for the analysis of hospital data, 9th EMR-IBS and Italian Region Conference, Thessaloniki (Greece), 8-12/05/2017
27. Estimation procedures for avoiding degenerate solutions in Candecom/Parafac, CLADAG 2015, Pula (Cagliari), 8-10/10/2015.
26. Remedies for degeneracy in Candecom/Parafac, IMPS 2015, Beijing (China), 12-16/7/2015.
25. Degeneracy in Candecom/Parafac and how to avoid it, SSC14, Chia (Cagliari), 14-17/6/2015.
24. An SVD penalized approach to Candecom/Parafac estimation, TRICAP 2015, Pecol di Zoldo (Belluno), 31/5-5/6/2015.1.
23. fclust: a toolbox for fuzzy clustering using the R programming language, CESS 2014, Rome, 24-25/11/2014.
22. The R package ThreeWay for three-way component analysis (poster), useR 2014, Los Angeles, 30/6-3/7/2014.
21. Finite mixtures for multivariate mixed data: a Parafac-based approach, SIS 2014, Cagliari, 11-13/6/2014.
20. The R package ThreeWay, CLADAG 2013, Modena, 18-20/9/2013.

19. FINDCLUS: Fuzzy INdividual Differences CLUStering, IFCS 2013, Tilburg (The Netherlands), 15-17/7/2013.
18. Three-way latent component models for longitudinal data, Workshop FIRB 2012, Perugia, 15-16/3/2013.
17. Candecom/Parafac via the Lasso, TRICAP 2012, Bruges (Belgium), 2-7/6/2012.
16. FINDCLUS: Fuzzy INdividual Differences CLUStering, 10-12/12/2010, JdS 2012, Bruxelles (Belgium), 21-25/5/2012.
15. Lasso-based linear regression for interval-valued data, ISI 2011, Dublin (Ireland), 21-26/8/2011.
14. FINDCLUS: Fuzzy INdividual Differences CLUStering, ERCIM 2010, London (UK), 10-12/12/2010.
13. Poverty measures in a fuzzy logic framework, SIS 2010, Padua, 16-18/6/2010.
12. Possibilistic clustering for fuzzy data, ERCIM 2009, Limassol (Cyprus), 29-31/10/2009.
11. Three-way component models for imprecise data, TRICAP 2009, Vall de Núria (Spain), 14-19/6/2009.
10. Fuzzy clustering for space-time series using spatial autocorrelation information, FUZZ-IEEE 2007, London (UK), 23-26/7/2007.
9. Metodi statistici per l'analisi di dati territoriali, AISRE 2005, Naples, 17-19/10/2005.
8. Three-way models for interval valued data, CLADAG 2005, Parma, 6-8/6/2005.
7. Territorial estimates and the evaluation of public investment, Workshop on Small area estimation and the local territory, Piacenza, 13/5/2005.
6. Data reduction models for interval valued observations, CLADAG 2003, Bologna, 22-24/9/2003.
5. Two-way component models of fuzzy data, IMPS 2003, Cagliari, 7-10/7/2003.
4. Principal component analysis for LR fuzzy data, SIS 2003, Naples, 9-11/6/2003.
3. Principal component analysis of Boolean symbolic objects, GFKL 2002, Mannheim (Germany), 22-24/7/2002.
2. Three-way component analysis of interval valued data, IFCS 2002, Krakow (Poland), 16-19/7/2002.
1. Three-mode factor analysis: an algorithm to simplify the core matrix, CLADAG 2001, Palermo, 5-6/7/2001.

## **Part XII– Software**

R package ThreeWay, version 1.1.3 (07/09/2015), with Maria Antonietta Del Ferraro and Henk A.L. Kiers.  
 R package fclust, version 1.1.2 (07/09/2015), with Maria Brigida Ferraro.