

# Gilbert Ritschard

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NCCR LIVES and  
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## Education

- 1979 PhD in Economics and Social Sciences, major in Econometrics and Statistics, U. of Geneva
- 1975 MSc in Econometrics (Diplôme en économétrie), U. of Geneva
- 1973 BS in Economics (licence en sciences économiques), major in quantitative methods, U. of Geneva

## Academic positions

### *since August 2015*

Professor Emeritus (professeur honoraire) of Statistics for social sciences at the University of Geneva

- 1994/2015 Full Professor, Department of Sociology [since 2014] and Department of Economics (formerly Dpt of Econometrics) [until 2013], Geneva

- 1986/94 Associate Professor (professeur adjoint), Department of Econometrics, Geneva

- 1980/86 Assistant Professor (maître-assistant), Department of Econometrics, Geneva

- 1979/80 Professor, Department of Economics, Université du Québec à Montréal

- 1973/79 Research and Teaching Assistant, Department of Econometrics, Geneva

### *Invited Professor*

University Lumière Lyon 2 (2000, 01, 03, 04, 05), HEC,  
University of Lausanne (2000/01), Glendon College, York  
University, Toronto (1999), University of Fribourg (1986/87).

## Teaching and Research interests

Statistics for the social sciences, life course, sequence analysis, event history analysis, longitudinal data and transition analysis, demography, categorical data analysis, application issues.

## Teaching

Beside basic descriptive and inferential statistics, I have taught at the master level Applied statistics and probability, Quantitative methods, Statistical analysis of categorical data, Event history analysis, and Discrete sequential data analysis. I have been involved in several doctoral schools and summer schools, such as the SLLS Summer School on Longitudinal and Life Course Research.

### Recent Funded Research

- Leader of the quantitative IP214 “Measuring vulnerability dynamics” of the NCCR “LIVES, Overcoming Vulnerability: Life Course Perspectives”, 2015-2018.
- Leader of the quantitative IP14 “Measuring Life Sequences and the Disorder of Lives” of the NCCR “LIVES, Overcoming Vulnerability: Life Course Perspectives”, 2010-2014.
- Main applicant (co-applicant Eric Widmer) for the SNF project “Mining event histories: Towards new insights on Swiss life courses”. FN-113998, 2007-09 and FN-122230, 2009-11.
- Co-applicant (main applicant Michel Oris) for the SNF project “Differential Mortality and Longevity in Switzerland, 1990-2004. From Social Structures to Social Resources”, FN-116416, 2007-2010.
- Co-applicant (main applicant Claudine Sauvain-Dugerdil) for the SNF project “Vulnérabilité et nouvelles compétences de la jeunesse malienne. Le double défi pour les jeunes et pour les institutions”. FN-109843. 2005-08.
- Co-leader with Lucio Baccaro (ILO) of the GIAN University of Geneva - ILO joint project on “Social Dialogue Regimes: Worker Rights, Collective Bargaining and Negotiated Policy Making”, 2005-06.
- INTERREG project on the French-Nyon-Geneva regional housing market, 2004-05.
- Co-applicant (main applicant Michel Oris) of the SNF project “Early Life Conditions, Social Mobility and Longevity in Later Life. A Contribution to the Urban Population History in 19th Century French-Speaking Switzerland”, FN-068113, 2003-2004, and FN-105478, 2005-06.

### Some Recent Managerial Activities

- President of the Sequence Analysis Association (SAA), 2018-2020
- Member of the LIVES board (steering committee) of the NCCR “LIVES, Overcoming Vulnerability: Life Course Perspectives”. 2010-2018.
- Chair of the organizing committee of the International conference on sequence analysis and related methods (LaCOSA 2), Lausanne, June 8-10, 2016
- Vice-Dean of the Faculty of Economic and Social Sciences, 2007-2014.
- Head of the Laboratory of Applied Economics, 2009-2012.
- Member of the Chair Board of the Institute of Demographic and Life Course Studies (formerly Laboratory of Demography), 2001-2015.
- Member of the Chair Board of the Center for Advanced Modeling Science (CADMOS), 2008-2010.

## Publications since 2005

Most publications can be downloaded from <http://mephisto.unige.ch/gilbert/> or from the University of Geneva Open Archive <http://archive-ouverte.unige.ch/>

## Books

- [Bk-2] Losa, F. B., M. Bigotta, E. Stephani, and G. Ritschard, (2014). *D'où venons-nous? Que sommes-nous? Où allons-nous? Analyse des parcours professionnels des chômeurs de longue durée en Suisse*. Ufficio di Statistica, TI, Giubiasco.
- [Bk-1] Losa, F. B., M. Bigotta, E. Stephani, and G. Ritschard, (2012). *Da Dove Veniamo? Che Siamo? Dove Andiamo? Analisi delle traiettorie di vita dei disoccupati di lunga durata in Svizzera*. Ufficio di Statistica, TI, Belinzona (CH).

## Edited Books

- [Ed-5] Ritschard, G. and M. Studer, editors, (2018). *Sequence Analysis and Related Approaches: Innovative Methods and Applications*, volume 10 of *Life course Research and Social Policies*. Springer, Cham.
- [Ed-4] McArdle, J. J. and G. Ritschard, editors, (2013). *Contemporary Issues in Exploratory Data Mining in the Behavioral Sciences*. Quantitative Methodology Series. Routledge, New York.
- [Ed-3] Guillet, F., G. Ritschard, and D. A. Zighed, editors, (2012). *Advances in Knowledge Discovery and Management: Volume 2*, volume 398 of *Studies in Computational Intelligence*. Springer, Berlin.
- [Ed-2] Guillet, F., G. Ritschard, D. A. Zighed, and H. Briand, editors, (2010). *Advances in Knowledge Discovery and Management*, volume 292 of *Studies in Computational Intelligence*. Springer, Berlin.
- [Ed-1] Ritschard, G. and C. Djeraba, editors, (2006). *Extraction et gestion des connaissances (EGC'2006)*, volume RNTI-E-6 (2 volumes) of *Revue des Nouvelles Technologies de l'Information*. Cépaduès.

## Articles, peer reviewed

- [Ar-25] Oris, M., O. Perroux, G. Ryczkowska, R. Schumacher, A. Remund, and G. Ritschard, (2023). Geneva. An urban sociodemographic database. *Historical Life Course Studies*, 13:212–227.
- [Ar-24] Ritschard, G., (2023). Measuring the nature of individual sequences. *Sociological Methods and Research*, 52(4):2016–2049. (first published online Sep 2021).
- [Ar-23] Ritschard, G., T. F. Liao, and E. Struffolino, (2023). Strategies for multidomain sequence analysis in social research. *Sociological Methodology*, 53(2):288–322.
- [Ar-22] Liao, T. F., D. Bolano, B. Cornwell, C. Brzinsky-Fay, A. Fasang, S. Helske, R. Piccarreta, M. Raab, G. Ritschard, E. Struffolino, and M. Studer, (2022). Sequence analysis: Its past, present, and future. *Social Science Research*, 107:102772.
- [Ar-21] Häfli, K., A. Hättich, C. Schellenberg, A. Krauss, and G. Ritschard, (2021). Stability and mobility in occupational career patterns over 36 years in Swiss women and men. *Longitudinal and Life Course Studies*, 12(4):469–494.
- [Ar-20] Zhelyazkova, N. and G. Ritschard, (2018). Parental leave take-up of fathers in Luxembourg. *Population Research and Policy Review*, 37(5):769–793.
- [Ar-19] Bürgin, R. and G. Ritschard, (2017). Coefficient-wise tree-based varying coefficient regression with vcrpart. *Journal of Statistical Software*, 80(6):1–33.

- [Ar-18] Bürgin, R., R. Schumacher, and G. Ritschard, (2017). Changes in the order of family life events in 20th-century Europe: A cross-regional perspective. *Historical Life Course Studies*, 4:41–58.
- [Ar-17] Oris, M., R. Gabriel, G. Ritschard, and M. Kliegel, (2017). Long lives and old age poverty: Social stratification and life-course institutionalization in Switzerland. *Research in Human Development*, 14(1):68–87.
- [Ar-16] Zhelyazkova, N. and G. Ritschard, (2017). Parental leave within the broader employment trajectory: What can we learn from administrative records? *Equality, diversity and inclusion: An international journal*, 36(7):607–627.
- [Ar-15] Gabadinho, A. and G. Ritschard, (2016). Analysing state sequences with probabilistic suffix trees: the PST R library. *Journal of Statistical Software*, 72(3):1–39.
- [Ar-14] Studer, M. and G. Ritschard, (2016). What matters in differences between life trajectories: A comparative review of sequence dissimilarity measures. *Journal of the Royal Statistical Society, Series A*, 179(2):481–511.
- [Ar-13] Bürgin, R. and G. Ritschard, (2015). Tree-based varying coefficient regression for longitudinal ordinal responses. *Computational Statistics & Data Analysis*, 86:65–80.
- [Ar-12] Bürgin, R. and G. Ritschard, (2014). A decorated parallel coordinate plot for categorical longitudinal data. *The American Statistician*, 68(2):98–103.
- [Ar-11] Losa, F. B., M. Bigotta, E. Stephani, and G. Ritschard, (2012). Trajectories des chômeurs de longue durée en Suisse - Une analyse de données AVS/AI. *Sécurité Sociale CHSS*, 4:224–228.
- [Ar-10] Bigotta, M., F. B. Losa, G. Ritschard, and E. Stephani, (2011). Le parcours professionnel des chômeurs de longue durée en suisse. *La Vie économique*, 7/8:51–54.
- [Ar-9] Gabadinho, A., G. Ritschard, N. S. Müller, and M. Studer, (2011). Analyzing and visualizing state sequences in R with TraMineR. *Journal of Statistical Software*, 40(4):1–37.
- [Ar-8] Studer, M., G. Ritschard, A. Gabadinho, and N. S. Müller, (2011). Discrepancy analysis of state sequences. *Sociological Methods and Research*, 40(3):471–510.
- [Ar-7] Oris, M., G. Ritschard, and O. Perroux, (2010). Growing religious pluralism in early nineteenth-century Geneva: New methods for revealing hidden structures and dynamics from censuses. *Popolazione e Storia*, 11(2):43–58.
- [Ar-6] Widmer, E. and G. Ritschard, (2009). The de-standardization of the life course: Are men and women equal? *Advances in Life Course Research*, 14(1-2):28–39.
- [Ar-5] Ritschard, G., A. Gabadinho, N. S. Müller, and M. Studer, (2008). Mining event histories: A social science perspective. *International Journal of Data Mining, Modelling and Management*, 1(1):68–90.
- [Ar-4] Sauvain-Dugerdil, C., B. Gakou, F. Berthé, A. W. Dieng, G. Ritschard, and M. Lerch, (2008). The start of the sexual transition in Mali: Risks and opportunities. *Studies in Family Planning*, 39(4):263–280.
- [Ar-3] Oris, M., G. Ritschard, and G. Ryczkowska, (2006). Les solitudes urbaines. Structures et parcours dans la Genève des années 1816-1843. *Annales de démographie historique*, 111 - 2006/1:59–87.
- [Ar-2] Oris, M., G. Ritschard, and G. Ryczkowska, (2005). Siblings in a (neo-)Malthusian town. From cross-sectional to longitudinal perspectives. *Historical Social Research*, 30:171–194.
- [Ar-1] Zighed, D. A., G. Ritschard, W. Erray, and V.-M. Scuturici, (2005). Decision trees with optimal joint partitioning. *International Journal of Intelligent Systems*, 20(7):693–718.

**Book Chapters, peer reviewed**

- [Ch-38] Ritschard, G., M. Bussi, and J. O'Reilly, (2018). An index of precarity for

- measuring early employment insecurity. In Ritschard and Studer [Ed-5], pages 279–295.
- [Ch-37] Ritschard, G. and M. Studer, (2018). Sequence analysis: Where are we, where are we going? In *Sequence Analysis and Related Approaches: Innovative Methods and Applications* [Ed-5], pages 1–11.
- [Ch-36] Oris, M. and G. Ritschard, (2014). Sequence analysis and transition to adulthood: An exploration of the access to reproduction in nineteenth-century East Belgium. In Blanchard, P., F. Bühlmann, and J.-A. Gauthier, editors, *Advances in Sequence Analysis: Theory, Method, Applications*, volume 2 of *Life Course Research and Social Policies*, pages 151–170. Springer, Heidelberg.
- [Ch-35] Gabadinho, A. and G. Ritschard, (2013). Searching for typical life trajectories applied to childbirth histories. In Levy, R. and E. Widmer, editors, *Gendered life courses - Between individualization and standardization. A European approach applied to Switzerland*, pages 287–312. LIT, Vienna.
- [Ch-34] Oris, M., G. Ritschard, and O. Perroux, (2013). Le pluralisme religieux croissant à Genève dans la première moitié du XIXe siècle. une exploration des dynamiques sous-jacentes. In *L'apprentissage du pluralisme religieux. Le cas genevois au XIXe siècle*, pages 41–61. Labor et Fides, Genève.
- [Ch-33] Ritschard, G., (2013). CHAID and earlier supervised tree methods. In McArdle, J. J. and G. Ritschard, editors, *Contemporary Issues in Exploratory Data Mining in the Behavioral Sciences*, Quantitative Methodology, pages 48–74. Routledge, New York.
- [Ch-32] Ritschard, G., R. Bürgin, and M. Studer, (2013). Exploratory mining of life event histories. In McArdle, J. J. and G. Ritschard, editors, *Contemporary Issues in Exploratory Data Mining in the Behavioral Sciences*, Quantitative Methodology, pages 221–253. Routledge, New York.
- [Ch-31] Ritschard, G., F. B. Losa, and P. Origoni, (2013). Validating tree descriptions of women’s labor participation with deviance-based criteria. In McArdle, J. J. and G. Ritschard, editors, *Contemporary Issues in Exploratory Data Mining in the Behavioral Sciences*, Quantitative Methodology, pages 128–149. Routledge, New York.
- [Ch-30] Widmer, E. and G. Ritschard, (2013). Life course changes in late modernity: towards destandardization and degendering? In Levy, R. and E. Widmer, editors, *Gendered life courses between individualization and standardization. A European approach applied to Switzerland*, pages 161–182. LIT, Vienna.
- [Ch-29] Widmer, E. and G. Ritschard, (2013). Parcours de vie : une pluralisation encadrée. In Burnay, N., S. Ertul, and J.-P. Melchior, editors, *Parcours sociaux et nouveaux desseins temporels*, volume 5 of *Investigations en anthropologie prospective*, pages 293–316. Academia-L’Harmattan.
- [Ch-28] Widmer, E. D. and G. Ritschard, (2013). Tous égaux devant la pluralisation des parcours de vie? Déstandardisation des trajectoires familiales et professionnelles et insertions sociales. In Gaudet, S., N. Burlone, and M. Lévesque, editors, *Repenser la famille et ses transitions, repenser les politiques publiques*, Société et Population, pages 79–110. Les Presses de l’Université Laval, PUL, Québec, CAN.
- [Ch-27] Bürgin, R., G. Ritschard, and E. Rousseaux, (2012). Visualisation de séquences d’événements. *Revue des Nouvelles Technologies de l’Information (RNTI)*, E, E-23:559–560.
- [Ch-26] Ritschard, G., (2012). Exploring sequential data. In *Discovery Science*, volume LNAI 7569 of *Lecture Notes in Artificial Intelligence*, pages 2–6. Springer-Verlag, Berlin.
- [Ch-25] Gabadinho, A., G. Ritschard, M. Studer, and N. S. Müller, (2011). Extracting and rendering representative sequences. In Fred, A., J. L. G. Dietz, K. Liu, and J. Filipe, editors, *Knowledge Discovery, Knowledge Engineering and Knowledge Management*, volume 128 of *Communications in Computer and Information Science (CCIS)*, pages 94–106. Springer-Verlag.

- [Ch-24] Gabadinho, A., G. Ritschard, M. Studer, and N. S. Müller, (2010). Indice de complexité pour le tri et la comparaison de séquences catégorielles. *Revue des nouvelles technologies de l'information RNTI*, E-19:61–66.
- [Ch-23] Müller, N. S., M. Studer, A. Gabadinho, and G. Ritschard, (2010). Analyse de séquences d'événements avec TraMineR. *Revue des nouvelles technologies de l'information RNTI*, E-19:639–640.
- [Ch-22] Müller, N. S., M. Studer, G. Ritschard, and A. Gabadinho, (2010). Extraction de règles d'association séquentielle à l'aide de modèles semi-paramétriques à risques proportionnels. *Revue des nouvelles technologies de l'information RNTI*, E-19:25–36.
- [Ch-21] Studer, M., N. S. Müller, G. Ritschard, and A. Gabadinho, (2010). Classifier, discriminer et visualiser des séquences d'événements. *Revue des nouvelles technologies de l'information RNTI*, E-19:37–48.
- [Ch-20] Studer, M., G. Ritschard, A. Gabadinho, and N. S. Müller, (2010). Discrepancy analysis of complex objects using dissimilarities. In Guillet, F., G. Ritschard, D. A. Zighed, and H. Briand, editors, *Advances in Knowledge Discovery and Management*, volume 292 of *Studies in Computational Intelligence*, pages 3–19. Springer, Berlin.
- [Ch-19] Gabadinho, A., N. S. Müller, G. Ritschard, and M. Studer, (2009). TraMineR: une librairie R pour l'analyse de données séquentielles. *Revue des nouvelles technologies de l'information RNTI*, E-15:483.
- [Ch-18] Ritschard, G., A. Gabadinho, M. Studer, and N. S. Müller, (2009). Converting between various sequence representations. In Ras, Z. and A. Dardzinska, editors, *Advances in Data Management*, volume 223 of *Studies in Computational Intelligence*, pages 155–175. Springer, Berlin.
- [Ch-17] Ritschard, G., S. Marcellin, and D. A. Zighed, (2009). Arbre de décision pour données déséquilibrées: sur la complémentarité de l'intensité d'implication et de l'entropie. In Gras, R., J.-C. Régnier, and F. Guillet, editors, *Analyse Statistique Implicative: une méthode d'analyse de données pour la recherche de causalités*, volume E-16 of *Revue des Nouvelles Technologies de l'Information (RNTI)*, chapter 1.7, pages 207–221. Cépaduès, Toulouse.
- [Ch-16] Ritschard, G., M. Studer, and M. Oris, (2009). Analyse statistique implicative des transitions professionnelles dans la Genève du 19e siècle. In Gras, R., J.-C. Régnier, and F. Guillet, editors, *Analyse Statistique Implicative: une méthode d'analyse de données pour la recherche de causalités*, volume E-16 of *Revue des Nouvelles Technologies de l'Information (RNTI)*, chapter 2.7, pages 421–435. Cépaduès, Toulouse.
- [Ch-15] Studer, M., G. Ritschard, L. Baccaro, I. Georgiou, N. S. Müller, and D. A. Zighed, (2009). Relaciones entre tipos de violaciones de libertades sindicales garantizadas por los convenios de le oit: Un análisis estadístico implicative de los resultados de un análisis automático de textos. In Orús, P., L. Zamora, and P. Gregori, editors, *Teoria y aplicaciones del Análisis Estadístico Implicativo*, pages 483–504. Departamento de Matemáticas, Universitat Jaume I de Castellón.
- [Ch-14] Studer, M., G. Ritschard, A. Gabadinho, and N. S. Müller, (2009). Analyse de dissimilarités par arbre d'induction. *Revue des nouvelles technologies de l'information RNTI*, E-15:7–18.
- [Ch-13] Widmer, E., G. Ritschard, and N. S. Müller, (2009). Trajectoires professionnelles et familiales en Suisse: quelle pluralisation? In Oris, M. et al., editors, *Transitions dans le parcours de vie et construction des inégalités*, pages 253–272. Presses Polytechniques Universitaires Romandes, Lausanne.
- [Ch-12] Marcellin, S., D. A. Zighed, and G. Ritschard, (2008). Evaluating decision trees grown with asymmetric entropies. In An, A., S. Matwin, Z. W. Ras, and D. Slezak, editors, *Foundations of Intelligent Systems, ISMIS08, Proceedings of the ISMIS Conference, Toronto, May 20-23, 2008*, volume LNAI 4994 of *Lecture Notes in Computer Science*, pages 58–67. Springer.

- [Ch-11] Müller, N. S., S. Lespinats, G. Ritschard, M. Studer, and A. Gabadinho, (2008). Visualisation et classification des parcours de vie. *Revue des nouvelles technologies de l'information RNTI*, E-11, II:499–510.
- [Ch-10] Ritschard, G., V. Pisetta, and D. A. Zighed, (2008). Inducing and evaluating classification trees with statistical implicative criteria. In Gras, R., E. Suzuki, F. Guillet, and F. Spagnolo, editors, *Statistical Implicative Analysis: Theory and Applications*, volume 127 of *Studies in Computational Intelligence*, pages 397–420. Springer-Verlag, Berlin.
- [Ch-9] Studer, M., A. Gabadinho, N. S. Müller, and G. Ritschard, (2008). Approches de type n-grammes pour l'analyse de parcours de vie familiaux. *Revue des nouvelles technologies de l'information RNTI*, E-11(2):511–522.
- [Ch-8] Pisetta, V., G. Ritschard, and D. A. Zighed, (2007). Choix des conclusions et validation des règles issues d'arbres de classification. *Revue des nouvelles technologies de l'information RNTI*, E-9:485–496.
- [Ch-7] Ritschard, G. and C. Sauvain-Dugerdil, (2007). L'enfant ciment du couple ou le couple comme ciment de la relation du père à l'enfant? Quelques enseignements de l'enquête rétrospective du Panel Suisse de Ménages. In Burton-Jeangros, C., E. Widmer, and C. Lalive d'Epinay, editors, *Interactions familiales et constructions de l'intimité.*, coll. Questions sociologiques, pages 57–73. L'Harmattan, Paris.
- [Ch-6] Zighed, D. A., S. Marcellin, and G. Ritschard, (2007). Mesure d'entropie asymétrique et consistante. *Revue des nouvelles technologies de l'information RNTI*, E-9:81–86.
- [Ch-5] Sauvain-Dugerdil, C., G. Ritschard, and A. W. Dieng, (2006). Socio-démographie des phases tardives de la vie familiale. In *Soigner, garder et payer. La famille et les phases tardives de la vie*, pages 35–68. Commission fédérale de coordination pour les questions familiales, COFF, Berne.
- [Ch-4] Losa, F. B., P. Origoni, and G. Ritschard, (2005). Usage non classificatoire d'arbres de classification, Enseignements d'une analyse de la participation féminine à l'emploi en suisse. *Revue des nouvelles technologies de l'information RNTI*, E-3:7–18.
- [Ch-3] Ritschard, G., (2005). Arbre BIC optimal et taux d'erreur. In Cloppet, F., J.-M. Petit, and N. Vincent, editors, *Extraction des connaissances : Etat et perspectives*, volume E-5, pages 403–408. Cépaduès.
- [Ch-2] Ritschard, G., (2005). Implication citoyenne, loisirs et études: le cas des étudiants de sciences sociales. In Widmer, E., D. Royer, B. Bürgenmeier, and F. Schultheis, editors, *Théorie et pratique de la démocratie, essais en l'honneur du professeur Yves Fricker*, pages 213–232. Economica, Paris.
- [Ch-1] Ritschard, G. and M. Oris, (2005). Life course data in demography and social sciences: Statistical and data mining approaches. In Levy, R., P. Ghisletta, J.-M. Le Goff, D. Spini, and E. Widmer, editors, *Towards an Interdisciplinary Perspective on the Life Course*, volume 10 of *Advances in Life Course Research*, pages 289–320. Elsevier, Amsterdam.

#### Other Invited Talks, Tutorials, ...

- [In-2] Ritschard, G., (2014). Promises and requirements of recent development in sequence analysis. In *Conference of the European Society of Historical Demography, Alghero-Sardinia, September 25-27, 2014*, (2014). Invited Talk.
- [In-1] Ritschard, G., (2013). TraMineR: A toolbox for exploring and rendering sequence data. In *2èmes Rencontres R, Montpellier, France*, (2013).

#### Papers at International Conferences, peer reviewed

- [IC-32] Adamopoulou, P., G. Ritschard, and A. Berchtold, (2016). Using dynamic microsimulation to understand professional trajectories of the active Swiss population. In *Proceedings of the International Conference on Sequence Analysis and Related Methods, Lausanne, June 8-10, 2016*, pages 151–154.

- NCCR LIVES, (2016).
- [IC-31] Bolano, D., A. Berchtold, and G. Ritschard, (2016). A discussion on hidden Markov models for life course data. In Ritschard, G. and M. Studer, editors, *Proceedings of the International Conference on Sequence Analysis and Related Methods, Lausanne, June 8-10, 2016*, pages 241–260. NCCR LIVES, (2016).
- [IC-30] Bürgin, R., R. Schumacher, and G. Ritschard, (2016). The transition of the sequencing of family life events in Europe during the second half of the 20th century: a cross-regional perspective. In *Conference of the European Society of Historical Demography (ESHD), 21-24 September 2016, Leuven*, (2016).
- [IC-29] Zhelyazkova, N. and G. Ritschard, (2016). Discovering and explaining patterns of work-family reconciliation in Luxembourg. In *Proceedings of the International Conference on Sequence Analysis and Related Methods, Lausanne, June 8-10, 2016*, pages 143–147. NCCR LIVES, (2016).
- [IC-28] Ritschard, G., M. Studer, and E. Rousseaux, (2014). Experiences with some longitudinal exploratory data mining problems. In *21st International Conference on Computational Statistics (COMPSTAT 2014), Geneva, August 19-22*, (2014).
- [IC-27] Rousseaux, E., M. Deville, and G. Ritschard, (2014). The SPNET package: Plotting social networks on maps with R. In *3èmes Rencontres R, Montpellier, France*, (2014).
- [IC-26] Rousseaux, E. and G. Ritschard, (2014). An association rule miner for unbalanced data based on artificial bee colony optimization. In *21st International Conference on Computational Statistics, Geneva, Switzerland*, (2014).
- [IC-25] Bürgin, R. and G. Ritschard, (2013). Model trees for ordinal sequences. In *73rd Annual Meeting of the Academy of Management, August 9-13, 2013, Orlando, Florida*, (2013).
- [IC-24] Bürgin, R. and G. Ritschard, (2013). New methodologies for career studies – Model trees for ordinal sequences. In *Symposium on Applying Sequence Analysis in Career & HRM Research: Opportunities, Challenges and New Perspectives. 73rd Annual Meeting of the Academy of Management, AOM, Orlando, Florida USA, August 2013*, (2013).
- [IC-23] Bürgin, R. and G. Ritschard, (2013). Tree-based method for varying coefficients in ordinal regression models with random effects. In *6th International Conference of the ERCIM WG on Computational and Methodological Statistics (ERCIM 2013), Senate House, University of London, UK, 14-16 December 2013*, (2013).
- [IC-22] Ritschard, G. and M. Studer, (2013). Mining life event sequences. In *Society For Longitudinal and Life Course Studies International Conference, Amsterdam, September 23-25, 2013*, (2013).
- [IC-21] Rousseaux, E., D. Bolano, and G. Ritschard, (2013). The Rsocialdata package: Handling survey data in R. In *Proceedings of the XXVII IUSSP International Population Conference, Busan, Republic of Korea*.
- [IC-20] Bürgin, R., G. Ritschard, and E. Rousseaux, (2012). Exploration graphique de données séquentielles. In *Atelier Fouille Visuelle de Données : méthodologie et évaluation, EGC 2012, Bordeaux*, pages 39–50. Association EGC.
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