

**Цитирания на статиите на доц. д-р Нейко Матеев Нейков, който са включени в  
дисертационния труд**

**[1] Müller, Ch. and Neykov, N. (2003). Breakdown Points of the Trimmed Likelihood and Related Estimators in Generalized Linear Models. *J. Statistical Planning and Inference*, 116, 503-519. ISSN 03783758**

- [1] Croux, C., C. Flandre and G. Haesbroeck (2002) The breakdown behaviour of the maximum likelihood estimator in the logistic regression model. *J. Statistics and Probability Letters*, 60,377-386.
- [2] Christman, A. and Rousseeuw, P. (2003). Robustness against separation and outliers in logistic regression. *Comput. Statist. and Data Anal.*, 43, 315-332.
- [3] Hubert, M., Rousseeuw, P.J. and Aelst, S., (2004). Robustness. In: *Encyclopedia of Actuarial Science*. Jozef L. Teugels and Bjørn Sundt (eds.), vol. 3, pp. 1515=-1529, DOI: 10.1002/9780470012505.tar048
- [4] Gervini, D. (2005). Robust adaptive estimators for binary regression models. *J. Statistical Planning and Inference*, 131, 297-311.
- [5] Cheng, T.-C. (2005). Robust regression diagnostics with data transformations. *Comput. Statist. and Data Anal.*, 49, 875–891.
- [6] Simeckova, M. (2005) Maximum Weighted Likelihood Estimator in Logistic Regression. WDS'05 Proceedings of Contributed Papers, Part I, 144–148. MATFYZPRESS (ISBN 80-86732-59-2)
- [7] Götte, H. (2005). Robuste Schätzer in generalisierten linearen Modellen mit Anwendung in einer Expositionsstudie. *Biometrisches Kolloquium der Deutschen Region der Internationalen Biometrischen Gesellschaft (DR-IBS) in Halle (Saale), März 2005, Programm und Herausgeber: J. Haerting , C. Becker, J. Spilke, O. Kuß, J. Röhmel, page 41, ISBN:3-86010-773-9.*
- [8] Стоименова, В. (2006). *Статистическо оценяване на разклоняващи се стохастични процеси*. Дисертационен труд.
- [9] Salibian-Barrera, M. and Yohai,V.J. (2006). A fast algorithm for S-regression estimates. *Computational & Graphical Statistics*, vol. 15, 414-427.
- [10] Ait-Ali,L.S. (2006). Analyse spatio-temporelle pour le suivi de structures evolutives en imagerie cerebrale multi-sequences. These, Docteur de l'universite de Rennes 1.
- [11] McLachlan, G. J., Shu-Kay Ng and Bean, R. (2006). Robust cluster analysis via mixture models. *Austrian J. of Statistics*, 35, 157–174.
- [12] Čížek,, P. (2006). Trimmed likelihood-based estimation in binary regression models. *Austrian J. of Statistics*, 35, 223–232
- [13] Basford, K., McLachlan, G., Bean, R. (2006). Issues of robustness and high dimensionality in cluster analysis. In: *Proceedings of Computational Statistics*, Alfredo Rizzi and Maurizio Vichi (eds), Physica-Verlag, 3-16.
- [14] Čížek,, P and W. Härdle (2006). Robust Econometrics, SFB 649 Discussion Paper 2006-050
- [15] De la Rey, T. (2007). *Two statistical problems related to credit scoring*. PhD Thesis.pdf
- [16] Tsung-Chi Cheng and Atanu Biswas (2008). Maximum trimmed likelihood estimator for multivariate mixed continuous and categorical data. *Comput. Statist. and Data Analysis*, 2042-2066 (doi: 10.1016/j.csda.2007.06.026)
- [17] Bricq. S. (2008). *Segmentation d'images IRM anatomiques par inference bayesienne multimodale et detection de lesions*. These Docteur de l'Universite Louis Pasteur - Strasbourg I.
- [18] Bricq, S., Ch. Collet and J.P. Armspach (2008). 3D Brain MRI Segmentation Based on Robust Hidden Markov Chain. *IEEE International Conference on Acoustics, Speech and Signal Processing - Proceedings*, art. no. 4517660, pp. 517-520. ([ICASSP'08](#), March 30 - April 4, 2008, Las Vegas, Nevada, USA.)

- [19] Hubert M., Rousseeuw P.J. and St. Van Aelst (2008). High-Breakdown Robust Multivariate Methods, *Statist. Sci.*, Vol. 23, 92-119.
- [20] Čížek,, P. (2008). General trimmed estimation: Robust approach to nonlinear and limited dependent variable models. *Econometric Theory*, 24(6), 1500-1529.
- [21] Čížek,, P. (2008). Robust and efficient adaptive estimation of binary-choice regression models. *Journal of the American Statistical Association*, vol. 103(482), 687-696.
- [22] Čížek,, P. (2009). Generalized method of trimmed moments. No 2009-25, ISSN 0924-7815, Discussion paper.
- [23] Bednarski, T., Clarke, B. R., & Schubert, D. D. (2010). Adaptive trimmed likelihood estimation in regression. *Discussiones mathematicae. Probability and statistics*, vol. 30, pp. 203-219.
- [24] Hubert,M. and Debruyne,M. (2010) Minimum covariance determinant, *Computational Statistics*, vol 2, 36-43.
- [25] Atkinson,A. Riani,M. and Cerioli, A. (2010) The forward search Theory and data analysis. *Journal of the Korean Statistical Society*, 39, 117-134.
- [26] Daniel García Lorenzo (2010): *Robust Segmentation of Focal Lesions on Multi-Sequence MRI in Multiple Sclerosis*, PhD Thesis: UNIVERSITÉ DE RENNES 1, 152pages.
- [27] Daouthi, A., Dogui, M. and Farhat, A. (2010). Essais de modélisation de l'épilepsie en Tunisie: Théorie et application basées sur des modeles de regression logistique. "42èmes Journées de Statistique, inria 00494696
- [28] Dong, Z. (2010). *Three Essays in Quantitative Analysis* (Doctoral dissertation, University of Cincinnati).
- [29] Bergesio, A. and Yohai, V.J. (2011). Projection estimators for generalized linear models. *Journal of the American Statistical Association*, 106 (494), pp. 661-671.
- [30] Cheng, Tsung-Chi (2011). Robust diagnostics for the heteroscedastic regression model. *Comput. Statist. and Data Anal.*, Vol 55, pages 1845-1866, doi:10.1016/j.csda.2010.11.024
- [31] García-Lorenzo, D., Prima, S., Arnold, D.L., Collins, D.L., Barillot, C. (2011). Trimmed-likelihood estimation for focal lesions and tissue segmentation in multisequence MRI for multiple sclerosis. *IEEE Transactions on Medical Imaging*, 30 (8), art. no. 5713257, pp. 1455-1467.
- [32] Chalabia, Y. and Wurtz,D. (2011). Weighted Trimmed Likelihood Estimator for GARCH Models. TR. <https://mpra.ub.uni-muenchen.de/26536/>
- [33] Chalabi,Y. and Wuertz, D. (2012). *Robust estimation with the weighted trimmed likelihood estimator*. <https://mpra.ub.uni-muenchen.de/42903/>
- [34] Chalabi, Y. (2012). *New directions in statistical distributions, parametric modeling and portfolio selection*. PhD Thesis, <http://e-collection.library.ethz.ch/view/eth:6457>
- [35] Ruckdeschel, P., Horbenko, N. (2013). Optimally robust estimators in generalized Pareto models. *Statistics*, vol. 47 , pp.762-791. DOI:10.1080/02331888.2011.628022.
- [36] Čížek, P., (2012). Robust and efficient adaptive estimation of binary-choice regression models. *Journal of the American Statistical Association*. vol. 103, pp. 685-698.
- [37] Cheng,T.-C. Maximum Trimmed Likelihood Estimation of Polychoric and Polyserial Correlations. <http://nccuir.lib.nccu.edu.tw/retrieve/81223/96211M008.pdf>
- [38] Croux, C., Haesbroeck, G., and Ruwet, C. (2013). Robust estimation for ordinal regression. *Journal of Statistical Planning and Inference*, vol. 143 (9), pp. 1486-1499.
- [39] Dimitroff, G., Tolosi, L., Popov, B. and Georgiev, G. (2013). Weighted maximum likelihood as a convenient shortcut to optimize the F-measure of maximum entropy classifiers. *Proceedings of Recent Advances in Natural Language Processing*, Hissar, Bulgaria, 7-13 September 2013, 207-214.
- [40] Hubert, M., Rousseeuw, P.J. and Aelst, S., (2014). Robustness in the Linear Regression M+N105odel. *Wiley StatsRef: Statistics Reference Online*. DOI: 10.1002/9781118445112.stat04468

- [41] Li, M. (2014). Robust estimation of the number of components for mixtures of linear regression models (Doctoral dissertation, Kansas State University, Filename: MengLi2014.pdf). <http://krex.k-state.edu/dspace/handle/2097/17856>
- [42] Bellas, A. (2014). Détection d'anomalies à la volée dans des flux de données de grande dimension (Doctoral dissertation, Université Panthéon-Sorbonne-Paris I). <https://tel.archives-ouvertes.fr/tel-00944263>
- [43] Alqallaf, F., and Agostinelli, C. (2015). Robust inference in generalized linear models. *Communications in Statistics - Simulation and Computation*, <http://www.tandfonline.com/doi/full/10.1080/03610918.2014.911896>, (online available) : doi:10.1080/03610918.2014.911896
- [44] Li, M., Xiang, S. and Yao, W. (2015). Robust estimation of the number of components for mixtures of linear regression models. *Computational Statistics*, DOI: 10.1007/s00180-015-0610-x <http://link.springer.com/article/10.1007/s00180-015-0610-x#page-1>
- [45] Čížek, P., (2016). Generalized method of trimmed moments. *Journal of Statistical Planning and Inference*, vol. 171, pp. 63-78. doi:10.1016/j.jspi.2015.11.004

**[2] Neykov, N.M. and Müller, Ch. (2003). Breakdown Point and Computation of Trimmed Likelihood Estimators in Generalized Linear Models. In: *Developments in Robust Statistics*, Dutter, R., Filzmoser, P., Gather, U., and Rousseeuw, P. (eds.), Physica-Verlag, Heidelberg, 277-286.**

- [46] Čížek, P. (2004). General Trimmed estimation: Robust approach to nonlinear and limited dependent variable models. No. 2004–130, ISSN 0924-7815
- [47] Simeckova, M. (2005) Maximum Weighted Likelihood Estimator in Logistic Regression. *WDS'05 Proceedings of Contributed Papers*, Part I, 144–148. MATFYZPRESS (ISBN 80-86732-59-2)
- [48] Grafarend, E. W. (2006). *Linear And Nonlinear Models: Fixed Effects, Random Effects and Mixed Models*. Walter de Gruyter, Berlin, ISBN-13: 978-3-11-016216-5.
- [49] Kolodko, J. and Vlacic, L. (2005). *Motion Vision Design of Compact Motion Sensing Solutions for Autonomous Systems. IET Control Engineering Series* vol 67, Published by The Institution of Engineering and Technology, London, UK.
- [50] Стоименова, В. (2006). Статистическо оценяване на разклоняващи се стохастични процеси. Дисертационен труд.
- [51] Ait-Ali, L.S. (2006). *Analyse spatio-temporelle pour le suivi de structures évolutives en imagerie cérébrale multi-séquences*. These, Docteur de l'université de Rennes 1.
- [52] Атанасов, Д. (2007). *Робастни методи за скалиране и точково оценяване*. Дисертационен труд.
- [53] Venter, J.H. and De La Rey, T. (2007). Detecting outliers using weights in logistic regression *Southern African Statist. J.* vol. 41(2), pp. 127-160.
- [54] Bricq, S., Collet, Ch., and J.P. Armspach (2008). Lesions detection on 3D brain MRI using trimmed likelihood estimator and probabilistic atlas", *Fifth IEEE International Symposium on Biomedical Imaging ISBI'08* <http://www.biomedicalimaging.org/>, Paris, France.
- [55] Bricq, S., Ch. Collet and J.P. Armspach (2008). 3D Brain MRI Segmentation Based on Robust Hidden Markov Chain. *IEEE International Conference on Acoustics, Speech and Signal Processing, ICASSP'08*, March 30 - April 4, 2008, Las Vegas, Nevada, USA, 517-520.
- [56] Bricq, S., Collet, Ch. and J. Armspach (2008). MS Lesion Segmentation based on Hidden Markov Chains, *MICCAI: 11th International conference on medical image computing and computer assisted intervention*, New-York 6-10 September 2008, Paper selected for "a [grand challenge](http://grand-challenge2008.bigr.nl/proceedings/): 3D segmentation in the clinic: A grand challenge" <http://grand-challenge2008.bigr.nl/proceedings/>

- [57] Bricq, S., Collet, Ch., J.-P Armspach "Markovian Segmentation of 3D brain MRI to detect multiple sclerosis lesions ", *IEEE International Conference on Image Processing ICIP'08*, October 12-15 2008, San Diego, CA, USA, 733-736.
- [58] Bricq,S., Collet,Ch. and Armspach,J.P. (2008). Brain MRI Segmentation. In: *Computational Surgery and Dual Training*. Marc Garbey, Barbara Lee Bass, Christophe Collet (eds.), DOI 10.1007/978-1-4419-1123-0\_3, Springer Science and Business Media, 45-73pp.
- [59] Thang, N. D., Lihui, C., and Keong, C. C. (2009). An outlier-aware data clustering algorithm in mixture models. In: *7th International Conference on Information, Communications and Signal Processing*, 2009. ICICS 2009.(pp. 1-5). IEEE, DOI: [10.1109/ICICS.2009.5397571](https://doi.org/10.1109/ICICS.2009.5397571)
- [60] Bednarski,T. (2010) Adaptive trimmed likelihood estimation in regression. *Discussiones Mathematicae Probability and Statistics* 30, 203–219.
- [61] Cheng, Tsung-Chi (2011). Robust diagnostics for the heteroscedastic regression model. *Comput. Statist. and Data Anal.*, vol 55, pp. 1845-1866, doi:10.1016/j.csda.2010.11.024
- [62] Thang, N.D., Lihui, C., Keong, C.C. (2011) Robust mixture model-based clustering with genetic algorithm approach, *Intelligent Data Analysis*, vol. 15 (3), pp. 357-373.
- [63] Wang, B., Wan, F., Mak, P.-U., Mak, P.-I. and Vai, M.-I. (2011). Outlier detection for single-trial EEG signal analysis, *Proc. of the 5th International IEEE EMBS Conference on Neural Engineering Cancun*, Mexico, April 27 - May 1, 2011, 478-481.
- [64] Wang, B., Wan, F., Mak, P.U., Mak, P.I., Vai, M.I. (2012). Robust learning of mixture models and its application on trial pruning for EEG signal analysis. *Lecture Notes in Artificial Intelligence 7104, New Frontiers in Applied Data Mining*, L. Cao et al. (Eds.), pp. 408-419. Springer Berlin Heidelberg.
- [65] Foschi, F., Casciano, M. C., Franconi, L., & Ichim, D. (2012). Designing multiple releases from the small and medium enterprises survey. In *Privacy in Statistical Databases* (pp. 200-215). Springer Berlin Heidelberg.
- [66] Foschi, F. (2011). Disclosure risk for high dimensional business microdata. *Joint UNECE-Eurostat Work Session on Statistical Data Confidentiality, Tarragona, Spain, 26-28 October 2011*. [https://www.unece.org/fileadmin/DAM/stats/documents/ece/ces/ge.46/2011/presentations/Topic\\_1\\_03\\_Foschi.pdf](https://www.unece.org/fileadmin/DAM/stats/documents/ece/ces/ge.46/2011/presentations/Topic_1_03_Foschi.pdf)
- [67] Grafarend, E.W. and Awange, J.L. (2012). *Applications of linear and nonlinear models: Fixed effects, random effects, and total least squares*. Springer Berlin Heidelberg.
- [68] Chalabia, Y. and Wurtz,D. (2011). Weighted Trimmed Likelihood Estimator for GARCH Models. TR. [mpra.ub.uni-muenchen.de/](http://mpra.ub.uni-muenchen.de/)
- [69] Chalabi,Y. and Wuertz, D. (2012). Robust estimation with the weighted trimmed likelihood estimator. <https://mpra.ub.uni-muenchen.de/26536/>
- [70] Chalabi, Y. (2012). New directions in statistical distributions, parametric modeling and portfolio selection (Doctoral dissertation, Diss., Eidgenössische Technische Hochschule ETH Zürich, Nr. 20694), <http://e-collection.library.ethz.ch/view/eth:6457>
- [71] Jaelani, U. (2010). Pendeteksian outlier dalam regresi logistik binerdengan metode detects outliers using weights (douw). Universitas Padjadjaran, Bandung, Indonesia. <http://cisral.unpad.ac.id/unpad-content/uploads/2011/06/pendeteksian-outlier-dalam-regresi-logistik-binerdengn-metode-detects-outliers-using-weights-douw.pdf>
- [72] Yang, L. (2014). *Robust fitting of mixture of factor analyzers using the trimmed likelihood estimator*. MSc Thesis, Department of Statistics, College of Arts and Sciences, Kansas State University Manhattan, Kansas (LiYang2014.pdf), <http://krex.k-state.edu/dspace/handle/2097/18118>
- [73] Yang, L., Xiang, S., and Yao, W. (2015). Robust Fitting of Mixtures of Factor Analyzers Using the Trimmed Likelihood Estimator. *Communications in Statistics-Simulation and Computation*, doi:10.1080/03610918.2014.999088, <http://www.tandfonline.com/doi/abs/10.1080/03610918.2014.999088>



[74] Galimzianova, A., Pernus, F., Likar, B., & Spiclin, Z. (2015). Robust estimation of unbalanced mixture models on samples with outliers. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, vol. 37(11), 2273-2285. DOI: 10.1109/TPAMI.2015.2404835

**[3] Dimova, R. and Neykov, N.M. (2004a). Generalized d-fullness Technique for Breakdown Point Study of the Trimmed Likelihood Estimator with Applications. In: *Theory and Applications of Recent Robust Methods*, M. Hubert, G. Pison, A. Struyf and S. Van Aelst (eds.), *Birkhauser*, Basel, pp. 83-92.**

[75] Ait-Ali, L.S. (2006). *Analyse spatio-temporelle pour le suivi de structures évolutives en imagerie cérébrale multi-séquences*. Thèse, Docteur de l'université de Rennes 1.

[76] Bricq, S. (2008). *Segmentation d'images IRM anatomiques par inférence bayésienne multimodale et détection de lésions*. Thèse de doctorat en Électronique, électrotechnique, automatique. Traitement d'images et vision par ordinateur. [http://miv.u-strasbg.fr/collet/ftp/PhD/PhD\\_Bricq.pdf](http://miv.u-strasbg.fr/collet/ftp/PhD/PhD_Bricq.pdf).

[77] Bricq, S., Collet, Ch., and J.P Armspach (2008a). Lesions detection on 3D brain MRI using trimmed likelihood estimator and probabilistic atlas", *Fifth IEEE International Symposium on Biomedical Imaging - From Nano to Macro*, ISBI2008 <<http://www.biomedicalimaging.org/>>, Paris, France. 93 – 96pp., ISBN 978-1-4244-2002-5,

[78] Bricq, S., Collet, Ch., J.-P Armspach (2008b). Markovian Segmentation of 3D brain MRI to detect multiple sclerosis lesions, *IEEE International Conference on Image Processing ICIP'08*, October 12-15 2008, San Diego, CA, USA, 733-736.

[79] Bricq, S., Collet, Ch. and J. Armspach (2008c). MS Lesion Segmentation based on Hidden Markov Chains, *MICCAI: 11th International conference on medical image computing and computer assisted intervention*, New-York 6-10 September 2008, Paper selected for "a [grand challenge](http://grand-challenge2008.bigr.nl/proceedings/): 3D segmentation in the clinic: A grand challenge" <http://grand-challenge2008.bigr.nl/proceedings/>

[80] Bricq, S., Ch. Collet and J.P. Armspach (2008d). 3D Brain MRI Segmentation Based on Robust Hidden Markov Chain. *IEEE International Conference on Acoustics, Speech and Signal Processing*, ICASSP'08, March 30 - April 4, 2008, Las Vegas, Nevada, USA, 517-520.

[81] Bricq, S., Collet, Ch. and Armspach, J.P. (2010). Brain MRI Segmentation. In: *Computational Surgery and Dual Training*. Garbey, M., Bass, L. and Collet, Ch. (eds.), DOI 10.1007/978-1-4419-1123-0\_3, Springer Science and Business Media, 4528pp.

[82] Van der Veecken, St. (2010). Robust and nonparametric methods for skewed data. Dissertation Thesis, Katholieke Universiteit Leuven – Faculty of Sciences, Legal depot number D/2010/10.705/68, ISBN number 978-90-8649-376-0

[83] Cheng, Tsung-Chi (2011). Robust diagnostics for the heteroscedastic regression model. *Comput. Statist. and Data Anal.*, vol. 55, pp.1845-1866, doi:10.1016/j.csda.2010.11.024

[84] Chalabia, Y. and Wurtz, D. (2011). Weighted Trimmed Likelihood Estimator for GARCH Models. TR. [mpra.ub.uni-muenchen.de/](https://mpra.ub.uni-muenchen.de/) <https://mpra.ub.uni-muenchen.de/id/eprint/26536>

[85] Chalabi, Y. and Wuertz, D. (2012). Robust estimation with the weighted trimmed likelihood estimator. <https://mpra.ub.uni-muenchen.de/id/eprint/42903>

[86] Chalabi, Y. (2012). New directions in statistical distributions, parametric modeling and portfolio selection. PhD Thesis, <http://e-collection.library.ethz.ch/view/eth:6457>

**[4] Neykov N.M, Dimova R. and Neytchev P. (2005) Trimmed Likelihood Estimation of The Generalized Extreme Value Distributions: A Monte-Carlo Study. *Pliska Studia Mathematica Bulgaria*. Vol. 17. pp. 187 - 200.**

[87] Атанасов, Д. (2007). Робастни методи за скалиране и точково оценяване. Дисертационен труд.

[5] Neykov, N.M., Filzmoser, P., Dimova, R. and Neytchev, P.N. (2007). Robust fitting of mixtures using the trimmed likelihood estimator. *Comput. Statist. And Data Analysis*, 52, 299-308.

- [88] Croux, C., et al., (2007). Machine learning and robust data mining, *Comput. Statist. and Data Analysis*, vol. 52, .
- [89] Atkinson, A.C., M. Riani and F. Lauriniz (2007). Approximate Envelopes for finding an unknown number of multivariate outliers in large data sets. In: *Proceedings of the 8th International Conference "Computer Data Analysis and Modeling: Complex Stochastic Data and Systems"*, September 11-15, 2007, Minsk. - Minsk: Belarusian State University, Vol. 1. pages. 11-18.
- [90] Johnson, L.D. and Sakoulis, G. (2008). Maximizing equity market sector predictability in a Bayesian time-varying parameter model. *Comput. Statist. and Data Analysis.*, doi: 10.1016/j.csda.2007.09.030
- [91] García-Lorenzo, D., S. Prima, Collins, D.L., Arnold, D.L., S. P. Morrissey and Christian Barillot (2008). Combining Robust Expectation Maximization and Mean Shift algorithms for Multiple Sclerosis Brain Segmentation. In *MICCAI Workshop in Medical Image Analysis for Multiple Sclerosis (MIAMS)*, C. Barillot and DL. Collins, (eds.), New York, USA, September 2008, pages 82-91.
- [92] García-Lorenzo, D., S. Prima, S. P. Morrissey, C. Barillot. (2008). A robust Expectation-Maximization algorithm for Multiple Sclerosis lesion segmentation. In: *MICCAI Workshop - MS Lesion Segmentation*, NY, USA, September 2008. [https://www.researchgate.net/publication/28359619\\_A\\_robust\\_Expectation-Maximization\\_algorithm\\_for\\_Multiple\\_Sclerosis\\_lesion\\_segmentation](https://www.researchgate.net/publication/28359619_A_robust_Expectation-Maximization_algorithm_for_Multiple_Sclerosis_lesion_segmentation)
- [93] Garcia-Lorenzo, D., Prima, S., Parkes, L., Ferrie, J.-C., Morrissey, S., P. and Barillot, C. (2008). The impact of processing workflow in performance of automatic white matter lesion segmentation in Multiple Sclerosis. In: *MICCAI Workshop in Medical Image Analysis for Multiple Sclerosis (MIAMS)*, C. Barillot and DL. Collins, (eds.), New York, USA, September 2008, pages 104-112.
- [94] Riani, M. Cerioli, A. Perrotta, D. and Torti, F. (2008). Robust methods for complex data. In: *Atti della XLIV Riunione Scientifica della Società Italiana di Statistica (SIS)*, Università della Calabria, Campus di Arcavacata, 25-27 Giugno 2008, ed. Cleup (ITALY). ISBN 978-88-6129-228-4, pp. 163-170.
- [95] Holland, E. P., Burrow, J. F., Dythama, C. and Aegerter, J. N. (2009). Modelling with uncertainty: Introducing a probabilistic framework to predict animal population dynamics, *Ecological Modelling*, vol. 220, pp. 1203–1217.
- [96] Gallegos, M.T. and Ritter, G. (2009). Trimmed ML Estimation of Contaminated Mixtures. *Sankhya : The Indian Journal of Statistics* 2009, vol. 71 A, Part 2, pp. 164-220.
- [97] Gallegos, M.T. and Ritter, G. (2009). Trimming algorithms for clustering contaminated grouped data and their robustness. *Adv. Data Anal. Classif.* vol. 3, pp. 135-167, DOI 10.1007/s11634-009-0044-9.
- [98] Thang, N.D., Lihui, C., Keong, C.C. (2009) An outlier-aware data clustering algorithm in mixture models. ICICS 2009 - Conference Proceedings of the 7th International Conference on Information, Communications and Signal Processing, art. no. 5397571.
- [99] García-Lorenzo, D., Lecoeur, J., Arnold, D.L., Collins, D.L., Barillot, C. (2009). Multiple sclerosis lesion segmentation using an automatic multimodal graph cuts .Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 5762 LNCS (PART 2), pp. 584-591.
- [100] Gallegos, M. T., Ritter, G. (2010). Using combinatorial optimization in model-based trimmed clustering with cardinality constraints. *Comput. Statist. and Data Anal.*, vol 54, pp. 637-654.
- [101] Garcia-Escudero, L.A., Gordaliza, A., Martin R.S., and Mayo-Iscar, A. (2010) Robust Clusterwise Linear Regression Through Trimming, submitted to *Comput. Statist. and Data Analysis*. Vol. 54, pp. 3057-3069. doi:10.1016/j.csda.2009.07.002

- [102] Cheng, T-C. (2010). Discussion: The forward search: Theory and data analysis. *Journal of the Korean Statistical Society*, 39, 153-159.
- [103] García-Escudero, L.A., Gordaliza, A., Matran, C. and Mayo-Iscar, A. (2010). A review of robust clustering methods. *Adv. Data Anal. Classif.* vol 4., pp. 89-109, DOI 10.1007/s11634-010-0064-5
- [104] Coretto, P. and Hennig, C. (2010). A simulation study to compare robust clustering methods based on mixtures. *Adv. Data Anal. Classif.* vol 4., pp. 111-135, DOI 10.1007/s11634-010-0064-5.
- [105] Daniel García Lorenzo (2010): *Robust Segmentation of Focal Lesions on Multi-Sequence MRI in Multiple Sclerosis*, PhD Thesis: UNIVERSITÉ DE RENNES 1, 152pages. <https://tel.archives-ouvertes.fr/tel-00485645/document>
- [106] Schieweck, R. (2010). Die Methode der kleinsten absoluten Abweichungen in linearen Modellen mit latenten Klassen und Ausreißern. Institut für Numerische und Angewandte Mathematik, de Georg-August Universität, Göttingen. <https://num.math.uni-goettingen.de/picap/pdf/E693.pdf>
- [107] Calo, D.G. (2011). Some Developments in Forward Search Clustering. In: *B.Fichet et al. (eds.), Classification and Multivariate Analysis for Complex Data Structures, Studies in Classification, Data Analysis, and Knowledge Organization*, pp. 135-143, DOI 10.1007/978-3-642-13312-1\_13, Springer-Berlin Heidelberg
- [108] Thang, N.D., Lihui, C., Keong, C.C. (2011) Robust mixture model-based clustering with genetic algorithm approach. *Intelligent Data Analysis*, vol. 15 (3), pp. 357-373.
- [109] Cheng, Tsung-Chi (2011). Robust diagnostics for the heteroscedastic regression model. *Comput. Statist. and Data Anal.*, vol. 55, pp. 1845-1866, doi:10.1016/j.csda.2010.11.024
- [110] Wang, B., Wan, F., Mak, P.U., Mak, P.I., Vai, M.I. (2011) Outlier detection for single-trial EEG signal analysis. *5th International IEEE/EMBS Conference on Neural Engineering*, NER 2011, art. no. 5910590, pp. 478-481.
- [111] García-Lorenzo, D., Prima, S., Arnold, D.L., Collins, D.L., Barillot, C. (2011). Trimmed-likelihood estimation for focal lesions and tissue segmentation in multisequence MRI for multiple sclerosis. *IEEE Transactions on Medical Imaging*, 30 (8), art. no. 5713257, pp. 1455-1467.
- [112] García-Escudero, L.A., Gordaliza, A., Matrán, C., Mayo-Iscar, A. (2011). Exploring the number of groups in robust model-based clustering. *Statistics and Computing*, 21 (4), pp. 585-599.
- [113] Wang, B., Wan, F., Mak, P.-U., Mak, P.-I., and Vai, M.-I. (2011). Robust deterministic annealing based em algorithm. *Electronics Letters*, 48 (5), pp. 289-290.
- [114] Wang, B., Wan, F., Mak, P.-U., Mak, P.-I. and Vai, M.-I. (2011). Outlier detection for single-trial EEG signal analysis, *Proc. of the 5th International IEEE EMBS Conference on Neural Engineering* Cancun, Mexico, April 27 - May 1, 2011, 478-481.
- [115] Foschi, F. (2011). Disclosure risk for high dimensional business microdata. Joint UNECE-Eurostat Work Session on Statistical Data Confidentiality, Tarragona, Spain, 26-28 October 2011. [https://www.unece.org/fileadmin/DAM/stats/documents/ece/ces/ge.46/2011/presentations/Topic\\_1\\_03\\_Foschi.pdf](https://www.unece.org/fileadmin/DAM/stats/documents/ece/ces/ge.46/2011/presentations/Topic_1_03_Foschi.pdf)
- [116] Bai, X., Yao, W., Boyer, J.E. (2012). Robust fitting of mixture regression models. *Comput. Statist. and Data Anal.*, vol. 56 (7), pp. 2347-2359.
- [117] Tomas-Fernandez, X., Warfield, S.K. (2012). Population intensity outliers or a new model for brain WM abnormalities. *Proceedings - International Symposium on Biomedical Imaging*, art. no. 6235867, pp. 1543-1546.
- [118] Tomas-Fernandez, X., Warfield, S.K. (2012). Automatic Brain Tumor Segmentation based on a Coupled Global-Local Intensity Bayesian Model. In: *Proceedings of the Medical Image Computing and Computer Assisted Intervention (MICCAI) Challenge on Multimodal Brain Tumor Image Segmentation (BRATS)*, Oct 2012, Nice, France. , pp. 41-48.
- [119] Foschi, F., Casciano, M.C., Franconi, L., Ichim, D. (2012). Designing multiple releases from the small and medium enterprises survey. *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, 7556 LNCS, pp. 200-215.

- [120] Fritz, H., García-Escudero, L.A., Mayo-Iscar, A. (2012). Tclust: An R package for a trimming approach to cluster analysis. *Journal of Statistical Software*, 47, Issue 12. <http://www.jstatsoft.org/>.
- [121] Mortazavi, D., Kouzani, A.Z., Soltanian-Zadeh, H. (2012). Segmentation of multiple sclerosis lesions in MR images: A review. *Neuroradiology*, vol. 54 (4), pp. 299-320.
- [122] Sajobi, T.T., Lix, L.M., Dansu, B.M., Laverty, W., Li, L. (2012). Robust descriptive discriminant analysis for repeated measures data. *Comput. Statist. and Data Anal.*, 56 (9), pp. 2782-2794.
- [123] Wang, B., Wan, F., Mak, P.U., Mak, P.I., Vai, M.I. (2012). Robust learning of mixture models and its application on trial pruning for EEG signal analysis. In: *Lecture Notes in Artificial Intelligence* 7104 LNAI, L. Cao et al. (Eds.), pp. 408-419. (Wang, B., Wan, F., Mak, P. U., Mak, P. I., and Vai, M. I. (2012). Robust learning of mixture models and its application on trial pruning for EEG signal analysis. In *New Frontiers in Applied Data Mining* (pp. 408-419). Springer Berlin Heidelberg.)
- [124] Yang, M.-S., Lai, C.-Y. and Lin, C.-Y. (2012). A robust em clustering algorithm for Gaussian mixture models. *Pattern Recognition*, vol. 45 (11), pp. 3950-3961.
- [125] Scholz, D. (2012). *Deterministic global optimization*, Springer.
- [126] Wei, Y. (2012). Robust mixture regression models using t-distribution. Msc Thesis, Department of Statistics, Kansas State University. <http://krex.k-state.edu/dspace/handle/2097/14110>
- [127] Chalabia, Y. and Wurtz, D. (2011). Weighted Trimmed Likelihood Estimator for GARCH Models. TR. <https://mpra.ub.uni-muenchen.de/26536/>
- [128] Chalabi, Y. and Wuertz, D. (2012). Robust estimation with the weighted trimmed likelihood estimator. <https://mpra.ub.uni-muenchen.de/42903/>
- [129] Chalabi, Y. (2012). *New directions in statistical distributions, parametric modeling and portfolio selection*. PhD Thesis, <http://e-collection.library.ethz.ch/view/eth:6457>
- [130] Ruwet, C., García-Escudero, L. A., Gordaliza, A., & Mayo-Iscar, A. (2013). On the breakdown behavior of the TCLUS clustering procedure. *TEST*, vol. 22, pp. 466-487.
- [131] García-Lorenzo, D., Francis, S., Narayanan, S., Arnold, D.L., Collins, D.L. (2013). Review of automatic segmentation methods of multiple sclerosis white matter lesions on conventional magnetic resonance imaging. *Medical Image Analysis*, vol. 17 (1), pp. 1-18.
- [132] García-Escudero, L. A., Gordaliza, A. and Mayo-Iscar, A. (2013). Comments on: model-based clustering and classification with non-normal mixture distributions. *Statistical Methods and Applications*, vol. 22, 459-461, DOI:10.1007/s10260-013-0245-4.
- [133] Fritz, H., García-Escudero, L.A., and Mayo-Iscar, A. (2013). Robust constrained fuzzy clustering. *Information Sciences*, 245, pp. 38-52.
- [134] Fritz, H., García-Escudero, L.A. and Mayo-Iscar, A. (2013). A fast algorithm for robust constrained clustering. *Comput. Statist. and Data Anal.*, 61, pp. 124-136.
- [135] Zhao, S., King, I. and Lyu, M. R. (2013). Capturing Geographical Influence in POI Recommendations. In *Neural Information Processing*, pp. 530-537, Springer Berlin Heidelberg.
- [136] Zhang, J. (2013). Robust mixture regression modeling with Pearson type VII distribution. MSc. Thesis. Department of Statistics, Kansas State University, Manhattan, Kansas. 49pages. <http://hdl.handle.net/2097/15648>
- [137] Coretto, P. and Hennig, C. (2013). Finding approximately Gaussian clusters via robust improper maximum likelihood. *arXiv preprint arXiv:1309.6895*.
- [138] Cerioli, A., and Perrotta, D. (2014). Robust clustering around regression lines with high density regions. *Advances in Data Analysis and Classification*, vol. 8, pp. 5-26. <http://www.scopus.com/inward/record.url?eid=2-s2.0-84894540819&partnerID=40&md5=495253aa28e4cc47fe189aeb61f9b248>
- [139] Song, W., Yao, W., and Xing, Y. (2014). Robust mixture regression model fitting by Laplace distribution. *Comput. Statist. and Data Anal.* 71, pp. 128-137. DOI:10.1016/j.csda.2013.06.022
- [140] García-Escudero, L. A., Gordaliza, A., and Mayo-Iscar, A. (2014). A constrained robust proposal for mixture modeling avoiding spurious solutions. *Advances in Data Analysis and Classification*, vol. 8, pp. 27-43. DOI:10.1007/s11634-013-0151-5.



- [141] Farcomeni, A. (2014). Robust constrained clustering in presence of entry-wise outliers. *Technometrics*, vol. 56, pp. 102-111. DOI:10.1080/00401706.2013.826148
- [142] Frénay, B., and Verleysen, M. (2014). Pointwise probability reinforcements for robust statistical inference. *Neural Networks*, vol. 50, 124–141, <http://dx.doi.org/10.1016/j.neunet.2013.11.012>  
<http://www.scopus.com/inward/record.url?eid=2-s2.0-84888793275&partnerID=40&md5=3065182ac5e3ad98c2bc1e3bcb2766d3>
- [143] Shi, J., Chen, K. and Song, W. (2014). Robust errors-in-variables linear regression via Laplace distribution. *Statistics and Probability Letters*, vol. 84, pp. 113-120.  
<http://www.scopus.com/inward/record.url?eid=2-s2.0-84886234048&partnerID=40&md5=103e1c80f03e1404c8b678bfa001ff5c>
- [144] Yao, W., Wei, Y. and Yu, C. (2014). Robust mixture regression using the t-distribution. *Comput. Statist. and Data Anal.* 71, 116-127, DOI:10.1016/j.csda.2013.07.019
- [145] Böhning, D., Hennig, C., McLachlan, G. J. and McNicholas, P. D. (2014). The 2nd special issue on advances in mixture models. *Comput. Statist. and Data Anal.*, vol. 71, pp. 1-2.  
<http://www.scopus.com/inward/record.url?eid=2-s2.0-84889098972&partnerID=40&md5=8a0e31f1ac9e56d28adab5245dd5d428>
- [146] Galimzianova, A., Špiclin, Ž., Likar, B. and Pernuš, F. (2014) Robust Mixture-Parameter Estimation for Unsupervised Segmentation of Brain MR Images. In: *Lecture Notes in Computer Science* 8331. Medical Computer Vision. Large Data in Medical Imaging, Menze, B. et al. (eds.). Springer International Publishing. pp 84-94.
- [147] Barillot, C., Karpate, Y., Krimi, A., & Commowick, O. (2014, June). Analyse d'images spatio-temporelles dans la Sclérose en Plaques. In *Actes de la conférence RFIA 2014*
- [148] Garcia-Escudero et. al (2014) Robust model-based clustering and mixture modeling by using trimming 3058.pdf
- [149] Garcia-Escudero, L. A., Gordaliza, A., Greselin, F., Ingrassia, S., and Mayo-Isacar, A. An adaptive method to robustify ML estimation in Cluster Weighted Modeling. In. *Proc. of the 47<sup>th</sup> SIS Scientific Meeting of the Italian Statistica Society*, Cagliari, Cabras, S., Di Battista, T. and W. Racugno (eds.), June 10-14, 2014, ISBN: 978-88-8467-874-4, <http://www.sis2014.it/proceedings/allpapers/3004.pdf>
- [150] Coretto, P. and Hennig, C. (2014). Robust improper maximum likelihood: tuning, computation, and a comparison with other methods for robust Gaussian clustering. *arXiv preprint arXiv:1406.0808.*, <http://arxiv.org/abs/1406.0808>
- [151] Bai, X. (2014). Robust mixture of regression models. PhD dissertation, Department of Statistics, College of Arts and Sciences, Kansas State University, Manhattan, Kansas, <http://krex.k-state.edu/dspace/handle/2097/18683>
- [152] Li, M. (2014). Robust estimation of the number of components for mixtures of linear regression models (Doctoral dissertation, Kansas State University, Filename: MengLi2014.pdf) <http://krex.k-state.edu/dspace/handle/2097/17856>
- [153] Yang, L. (2014). Robust fitting of mixture of factor analyzers using the trimmed likelihood estimator. MSc Thesis, Department of Statistics, College of Arts and Sciences, Kansas State University, Manhattan, Kansas, <http://krex.k-state.edu/dspace/handle/2097/18118>
- [154] Yu, C. (2014). Robust Mixture Modelling. PhD dissertation, Department of Statistics, College of Arts and Sciences, Kansas State University, Manhattan, Kansas, <http://krex.k-state.edu/dspace/handle/2097/18153>
- [155] Wang, R., Li, C., Wang, J., Wei, X., Li, Y., Hui, C. and Zhu, Y. (2014a) Automatic segmentation of white matter lesions on magnetic resonance images of the brain by using an outlier detection strategy. *Magnetic Resonance*, vol. 32, pp. 1321-1329. DOI: <http://dx.doi.org/10.1016/j.mri.2014.08.010>
- [156] Wang, R., C Li, J Wang, X Wei, Y Li, C Hui, Y Zhu (2014b). Automatic Segmentation and Quantitative Analysis of White Matter Hyperintensities on FLAIR Images Using Trimmed-Likelihood Estimator. *Academic Radiology*, vol. 21, pp. 1512-1523, DOI: 10.1016/j.acra.2014.07.001  
<http://www.scopus.com/inward/record.url?eid=2-s2.0-84908498313&partnerID=40&md5=7068d2c68d81c0d0ea9fb98f922d8344>

- [157] Bellas, A. (2014). *Détection d'anomalies à la volée dans des flux de données de grande dimension* (Doctoral dissertation, Université Panthéon-Sorbonne-Paris I). <https://tel.archives-ouvertes.fr/tel-00944263>
- [158] Ritter, G. (2014). *Robust Cluster Analysis and Variable Selection*. Chapman and Hall/CRC Press, Monograph on Statistics and Applied Probability, 392 pages, ISBN 9781439857960.
- [159] Punzo, A. and McNicholas, P.D. (2014) Robust Clustering in Regression Analysis via the Contaminated Gaussian Cluster-Weighted Model (arXiv preprint arXiv:1409.6019, 2014).
- [160] Barillot, Ch., Karpate, Y., Krimi, A. and Commowick, O. (2014). Analyse d'images spatio-temporelles dans la Sclerose en Plaques. *Reconnaissance de Formes et Intelligence Artificielle (RFIA) 2014*, Jun 2014, Rouen, France, <https://hal.inria.fr/hal-00988875/en>
- [161] Wang, J., Wang, R., Zhang, S., Ding, J., Zhu, Y. (2014c). Automatic segmentation of brain MR images for patients with different kinds of epilepsy. *Proceedings of 2014 International Conference on Smart Computing, SMARTCOMP 2014*, art. no. 7043861, pp. 216-220, DOI: 10.1109/SMARTCOMP.2014.7043861.  
<http://www.scopus.com/inward/record.url?eid=2-s2.0-84946531368&partnerID=40&md5=e3961d965c7e60730bad9121ca535a54>
- [162] Wang, R., Li, C., Wang, J., Wei, X., Li, Y., Zhu, Y. and Zhang, S. (2015), Automatic segmentation and volumetric quantification of white matter hyperintensities on fluid-attenuated inversion recovery images using the extreme value. *Neuroradiology*, vol. 57(3), pp 307-320. DOI 10.1007/s00234-014-1466-4,  
<http://www.scopus.com/inward/record.url?eid=2-s2.0-84925517560&partnerID=40&md5=48cdb46458668a44c1e6e4d242fbffc9>
- [163] Garcia-Escudero, L.A., Gordaliza, A., Martin R.S., and Mayo-Isacar, A. (2015). Avoiding Spurious Local Maximizers in Mixture Modeling. *Stat. Computing*. vol. 25, pp. 619-633, DOI 10.1007/s11222-014-9455-3
- [164] Yu, K., Dang, X., Bart, H., & Chen, Y. (2015). Robust model-based learning via spatial-EM algorithm. *IEEE Transactions on Knowledge and Data Engineering*, vol. 27(6), pp. 1670-1682, <http://www.scopus.com/inward/record.url?eid=2-s2.0-84929486157&partnerID=40&md5=1677815001846688a3cb211355467dc1>
- [165] Melnykov, Volodymyr, Semhar Michael, and Igor Melnykov. (2015). Recent Developments in Model-Based Clustering with Applications. In: *Partitional Clustering Algorithms*, Celebi, M. E. (ed.), Springer International Publishing, pp. 1-39. DOI: 10.1007/978-3-319-09259-1\_1  
<http://www.scopus.com/inward/record.url?eid=2-s2.0-84944559330&partnerID=40&md5=77d3ac365428e08a823de7f7644ea984>
- [166] Brito, P., Duarte Silva A.P., Dias, J.G. (2015). Probabilistic Clustering of Interval Data. *Intelligent Data Analysis*. 2015, vol. 19(2), 293-313.
- [167] Garcia-Escudero, L. A., Gordaliza, A., Greselin, F., Ingrassia, S., and Mayo-Isacar, A. (2015). Robust estimation of mixtures of regressions with random covariates, via trimming and constraints. *arXiv preprint arXiv:1502.01118*.
- [168] Tomas-Fernandez, X. and Warfield, S.K. (2015). A Model of Population and Subject (MOPS) Intensities with Application to Multiple Sclerosis Lesion Segmentation. DOI: 10.1109/TMI.2015.2393853, *IEEE Transactions on Medical Imaging*, vol. 34(6), 1349-1361.  
<http://www.scopus.com/inward/record.url?eid=2-s2.0-84930654513&partnerID=40&md5=ae9830aa4d0e37abdf96659439b39ba0>
- [169] Warfield, S.K., Tomas-Fernandez, X. (2015). Lesion Segmentation. In: *Brain Mapping: An Encyclopedic Reference*, Arthur W. Toga (ed.), vol. 1, pp. 323-332. Academic Press: Elsevier.  
<http://www.scopus.com/inward/record.url?eid=2-s2.0-84943271810&partnerID=40&md5=cb852e3df8dfc708866af84472a3f6a4>
- [170] Jiang, Y., (2015). Robust variable selection for mixture linear regression models. *University Bulletin of Natural Sciences and Engineering Series B: Mathematics and Statistics* 45(54), DOI: 10.15672/HJMS.2015549560 (Department of Statistics, College of Economics, Jinan University, Guangzhou, 510632, China), <http://www.hjms.hacettepe.edu.tr/uploads/74b6a11c-9d48-4b58-94bd-1f0c7f982638.pdf> .
- [171] Yu, C., Chen, K. and Yao, W. (2015). Outlier detection and robust mixture modeling using nonconvex penalized likelihood. *Journal of Statistical Planning and Inference*, vol. 164, 27-38, doi:10.1016/j.jspi.2015.03.003
- [172] Farcomeni, A., and Greco, L. (2015). *Robust Methods for Data Reduction*. CRC Press.
- [173] Farcomeni, A. and Greco, L., 2015. S-estimation of hidden Markov models. *Computational Statistics*, vol. 30, pp. 57-80. DOI: 10.1007/s00180-014-0521-2.

- [174] Jäntschi, L., Pruteanu, L. L., Cozma, A. C., & Bolboacă, S. D. (2015). Inside of the Linear Relation between Dependent and Independent Variables. *Computational and Mathematical Methods in Medicine*, 2015. <http://dx.doi.org/10.1155/2015/360752>
- [175] Galimzianova, A., Pernus, F., Likar, B., & Spiclin, Z. (2015). Robust estimation of unbalanced mixture models on samples with outliers. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, vol.37, Issue: 11, 2273 – 2285, DOI: 10.1109/TPAMI.2015.2404835
- [176] Yang, L., Xiang, S., and Yao, W. (2015). Robust Fitting of Mixtures of Factor Analyzers Using the Trimmed Likelihood Estimator. *Communications in Statistics-Simulation and Computation*, (just-accepted), DOI:10.1080/03610918.2014.999088
- [177] Karimian, A., and Jafari, S. (2015). A new method to segment the multiple sclerosis lesions on brain magnetic resonance images. *Journal of Medical Signals and Sensors*, 5(4), 238-244.
- [178] García-Escudlero, L. A., Greselin, F., and Mayo-Iscar, A. (2015). Robust clustering for heterogenous skew data.
- [179] García-Escudero, L.A., Gordaliza, A., Matrán, C. and Mayo-Iscar, A., 2015. Avoiding spurious local maximizers in mixture modeling. *Statistics and Computing*, vol. 25(3), pp.619-633.
- [180] Li, M., Xiang, S. and Yao, W. (2015). Robust estimation of the number of components for mixtures of linear regression models. *Computational Statistics*, DOI: 10.1007/s00180-015-0610-x
- [181] Wang, Wan-Lun and Lin, Tsung-I. (2015). Robust model-based clustering via mixtures of skew-t distributions with missing information. *Advances in Data Analysis and Classification Volume 9, Issue 4, pp 423-445, doi.10.1007/s11634-015-0221-y. http://www.scopus.com/inward/record.url?eid=2-s2.0-84948714136&partnerID=40&md5=e457d4bdb89ecd8b6662e335dc6bd3d*
- [182] Dođru, F.Z. and Arslan, O. (2015). Robust mixture regression modeling based on the Generalized M (GM)-estimation method." *arXiv preprint arXiv:1511.07384*.
- [183] Karpate, Yogesh. (2015) *Enhanced representation and learning of magnetic resonance image signatures in multiple sclerosis*. PhD diss., Université Rennes 1, <https://tel.archives-ouvertes.fr/tel-01280532/document>
- [184] Galimzianova, A., Pernus, F., Likara, B. and Spiclin, Z. (2016) Stratified mixture modeling for segmentation of white-matter lesions in brain MR images. *NeuroImage*, vol. 124, pp. 1031-1043 DOI: 10.1016/j.neuroimage.2015.09.047, <http://www.scopus.com/inward/record.url?eid=2-s2.0-84944930648&partnerID=40&md5=24d267c5dd04946f0b63758450e35101>
- [185] Jerman, T., Galimzianova, A., Pernuš, F., Likar, B. and Špiclin, Ž., 2016. Combining Unsupervised and Supervised Methods for Lesion Segmentation. In: *Brainlesion: Glioma, Multiple Sclerosis, Stroke and Traumatic Brain Injuries*, Lecture Notes in Computer Science (including subseries *Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics*), 9556, (pp. 45-56). Springer International Publishing. <http://www.scopus.com/inward/record.url?eid=2-s2.0-84961674039&partnerID=40&md5=443125de2c6063bc6def3ba85ff42657>
- [186] García-Escudlero, L. A., Gordaliza, A., Greselin, F., Ingrassia, S., and Mayo-Iscar, A. (2016). The joint role of trimming and constraints in robust estimation for mixtures of Gaussian factor analyzers. *Comput. Statist. and Data Anal.* vol. 99, pp. 131-147.
- [187] Bai, X., Chen, K., & Yao, W. (2016). Mixture of linear mixed models using multivariate t distribution. *Journal of Statistical Computation and Simulation*, vol. 86(4), pp. 771-787. <http://www.scopus.com/inward/record.url?eid=2-s2.0-84949536918&partnerID=40&md5=74c33a54cf365ce5202c4d0621468ef6>
- [6] Neykov, N. M., Filzmoser, P. and Neytchev, P. N. (2012). Robust joint modeling of mean and dispersion through trimming. *Comput. Stat. Data Anal.*, 56, 34-48. doi:10.1016/j.csda.2011.07.007.**
- [188] Croux, C., Ronchetti, E., Salíbian-Barrera, M., Van Aelst, S. (2013). Special issue on robust analysis of complex data. *Comput. Statist. and Data Anal.*, 65, pp. 1-3.
- [189] Mohd Salleh, R. (2013). *A robust estimation method of location and scale with application in monitoring process variability* (Doctoral dissertation, Universiti Teknologi Malaysia).128 pages.

- [190] Yee, T.W. (2014). Reduced-rank vector generalized linear models with two linear predictors. *Comput. Statist. and Data Anal.* 71, 889-902, doi.org/10.1016/j.csda.2013.01.012
- [191] Galimzianova, A., Špiclin, Ž., Likar, B. and Pernuš, F. (2014) Robust Mixture-Parameter Estimation for Unsupervised Segmentation of Brain MR Images. In: *Lecture Notes in Computer Science 8331. Medical Computer Vision. Large Data in Medical Imaging*, Menze, B. et al. (eds.). Springer International Publishing. pp .84-94.
- [192] Galimzianova, A., Pernus, F., Likar, B., and Spiclin, Z. (2015). Robust estimation of unbalanced mixture models on samples with outliers. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, vol.37, Issue: 11, 2273 – 2285, DOI: 10.1109/TPAMI.2015.2404835
- [193] Gutierrez, A. (2015). The Use of Working Variables in the Bayesian Modeling of Mean and Dispersion Parameters in Generalized Nonlinear Models with Random Effects. *Communications in Statistics-Simulation and Computations*, vol. 44(1), 168-195, DOI: 10.1080/03610918.2013.770529
- [7] Neykov, N.M., Čížek,P., Filzmoser,P. and Neytchev, P.N. (2012) The least trimmed quantile regression. *Comput. Stat. Data Anal.*, 56, 1757-1770, doi:10.1016/j.csda.2011.10.023**
- [194] Costanzo, A. (2013). Robust Models For Style Analysis. University of Cassino and Southern Lazio, Italy, PhD Thesis.
- [195] Davino,C., Furno,M. and Vistocco, D. (2014). *Quantile Regression: Theory and Applications*. John Wiley & Sons, Ltd, UK.
- [196] Mafusalov, A. and Uryasev, S. (2016) CvaR (Super quantile) Norm Stochastic Case. *European Journal of Operational Research*, vol. 249, 200-208. doi:10.1016/j.ejor.2015.09.058.
- [197] Zioutas, G., Chatzinakos, C., Nguyen, T. D., and Pitsoulis, L. (2015). Optimization techniques for multivariate least trimmed absolute deviation estimation. *arXiv preprint arXiv:1511.04220*.
- [8] Neykov, N.M., Filzmoser,P. and Neytchev, P.N. (2014). Ultrahigh dimensional variable selection through the penalized maximum trimmed likelihood estimator. *Stat. Papers*, 55, 187-207. DOI 10.1007/s00362-013-0516-z**
- [198] Kawano, S. (2014). Selection of tuning parameters in bridge regression models via Bayesian information criterion. *Statistical Papers*, vol. 55(4), 1207-1223.
- [199] Park, H. and Konishi, S. (2015). Principal component selection via adaptive regularization method and generalized information criterion. *Statistical Papers*, DOI 10.1007/s00362-015-0691-1,
- [200] Li,J., Li, Y. and Zhang, R. (2015). B spline variable selection for the single index models. *Statistical Papers*, DOI: 10.1007/s00362-015-0721-z
- [201] Kalina, J. (2015). Some robust estimation tools for multivariate modeL The 9th International Days of Statistics and Economics, Prague, September 10-12, 2015. [http://msed.vse.cz/msed\\_2015/article/7-Kalina-Jan-paper.pdf](http://msed.vse.cz/msed_2015/article/7-Kalina-Jan-paper.pdf)
- [9] Dimova, R. and Neykov, N.M. (2004b). Application of the d-fullness Technique for Breakdown Point Study of the Trimmed Likelihood Estimator to a Generalized Logistic Model. *Pliska Stud. Math. Bulgar.* 16, 35-41.**
- [202] Стоименова, В. (2006). Статистическо оценяване на разклоняващи се стохастични процеси. Дисертационен труд.
- [203] Атанасов, Д. (2007). Робастни методи за скалиране и точково оценяване. Дисертационен труд.
- [10] Dimova, R. and Neykov, N.M. (2003). Generalized d-fullness Technique for Breakdown Point Study of the Trimmed Likelihood Estimator. *Compt. rend. Acad. Bulg. Sci.*, Tome 56, No 5, 7-12.**



**[11] Neykov, N.M., Filzmoser, P., Dimova, R. and Neytchev, P.N. (2004). Mixture of Generalized Linear Models and the Trimmed Likelihood Methodology. In: Proceedings in Computational Statistics, J. Antoch (ed.), Physica-Verlag, 1585-1592.**

- [204] Cizek, P. (2004). General trimmed estimation: Robust approach to nonlinear and limited dependent variable models. No. 2004–130, ISSN 0924-7815
- [205] Ait-Ali, L.S., Prima, S., Hellier, P., Carsin, B., Edan, G., Barillot, C. (2005). STREM: A robust multidimensional parametric method to segment MS lesions in MRI. In: *Medical Image Computing and Computer-Assisted Intervention* (Proceedings of the 8th International Conference, Palm Springs, CA, USA, October 26-29, 2005), Duncan, J. and Gerig, G. (eds.), Lecture Notes in Computer Science 3749, Springer-Verlag, pp.409-416.
- [206] Ait-Ali, L.S. (2006). Analyse spatio-temporelle pour le suivi de structures évolutives en imagerie cérébrale multi-sequences. These, Docteur de l'université de Rennes 1.
- [207] Ait-Ali, L.S., Prima, S., B., Edan, G., Barillot, C. (2006). *Segmentation longitudinale des lésions de SEP en IRM cérébrale multimodale*. In 15ème Congrès Francophone AFRIF/AFIA de Reconnaissance des Formes et Intelligence Artificielle, RFIA'2006, Tours, France, January 2006. <http://www.irisa.fr/visages/publi/author/Laure.A%Eft-ali-eng.html>
- [208] McLachlan, G. J., Shu-Kay Ng and Bean, R. (2006). Robust cluster analysis via mixture models. *Austrian J. of Statistics*, 35, 157–174.
- [209] Basford, K., McLachlan, G., and Bean, R. (2006). Issues of robustness and high dimensionality in cluster analysis. In: *Proceedings in Computational Statistics*, Alfredo Rizzi and Maurizio Vichi (eds), Physica –Verlag, 3-16.
- [210] Herrera, J.V.M. (2006) *Segmentación Robusta de Imágenes de RM cerebral*. Tesis Doctoral, Tesis sometida al Departamento de Física Aplicada de la Universidad Politécnica de Valencia para la obtención del Grado de Doctor, Valencia, Spain. <http://personales.upv.es/jmanjon/tesis.pdf>
- [211] Lecoeur, J. and Barillot, C. (2007). Segmentation d'images cérébrales: Etat de l'art, Rapport de Recherche N° 6306, Juillet 2007, INSTITUT NATIONAL DE RECHERCHE EN INFORMATIQUE ET EN AUTOMATIQUE.
- [212] Bricq, S., Collet, Ch, and J.-P Armspach Markovian Segmentation of 3D brain MRI to detect multiple sclerosis lesions ", *IEEE International Conference on Image Processing ICIP'08*, October 12-15 2008, San Diego, CA, USA, 733-736.
- [213] García-Escudero, L. A., Gordaliza, A., Matrán, C., and Mayo-Isacar, A. (2011). Exploring the number of groups in robust model-based clustering. *Statistics and Computing*, 21(4), 585-599.
- [214] Bashir, S., and Carter, E. M. (2012). Robust mixture of linear regression models. *Communications in Statistics-Theory and Methods*, 41(18), 3371-3388.