Michal Pešta

Publications

A Scientific monographs

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B Chapters in scientific monographs

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C1 Papers in international scientific journals (indexed in WoS)

[1] Powell M, Cempírková D, Dundr P, Grimmichová T, Trebický F, Brown R, Gregorová J, Litschmannová M, Janurová K, Pešta M, Heneberg P (2020) Metformin treatment for diabetes mellitus correlates with progression and survival in colorectal carcinoma. *Translational Oncology*, 13(2):383–392

IF(2018)=3.138

[2] Pešta M, Wendler M (2019) Nuisance-parameter-free changepoint detection in non-stationary series. *TEST*, `doi.org/10.1007/s11749-019-00659-1`

IF(2018)=1.423

[3] Peštová B, Pešta M (2018) Abrupt change in mean using block bootstrap and avoiding variance estimation. *Computational Statistics*, 33(1):413–441

IF(2018)=0.680

[4] Bašová P, Pešta M, Sochor M, Stopka T (2017) Prediction potential of serum miR-155 and miR-24 for relapsing early breast cancer. *International Journal of Molecular Science*, 18(10):2116

IF(2017)=3.678

[5] Dusílková N, Bašová P, Polívka J, Kodet O, Kulvait V, Pešta M, Trněný M, Stopka T (2017) Plasma miR-155, miR-203, and miR-205 are biomarkers for monitoring of primary cutaneous T-cell lymphomas. *International Journal of Molecular Science*, 18(10):2136

IF(2017)=3.678

[6] Gijbels I, Omelka M, Pešta M, Veraverbeke N (2017) Score tests for covariate effects in conditional copulas. *Journal of Multivariate Analysis*, 159(7):111–133

IF(2017)=1.009

[7] Hudecová Š, Pešta M, Hlubinka D (2017) Modelling prescription behaviour of general practitioners. *Mathematica Slovaca*, 67(3):785–802

IF(2017)=0.314

[8] Pešta M (2017) Block bootstrap for dependent errors-in-variables. *Communications in Statistics – Theory and Methods*, 46(4):1871–1897

IF(2017)=0.353

[9] Peštová B, Pešta M (2017) Change point estimation in panel data without boundary issue. *Risks*, 5(1):7

IF —, indexed in WoS

[10] Polgárová K, Vargová K, Kulvait V, Dusilková N, Minárik Ľ, Zemanová Z, Pešta M, Jonášová A, Stopka T (2017) Somatic mutation dynamics in MDS patients treated with Azacitidine indicate clonal selection in patients-responders. *Oncotarget*, 8(67):111966–111978

IF(2016)=5.168

[11] Vargová K, Pešta M, Obrtlíková P, Dusílková N, Minárik Ľ, Vargová J, Berková A, Zemanová Z, Michalová K, Špaček M, Trněný M, Stopka T (2017) MiR-155/miR-150 network regulates progression through the disease phases of chronic lymphocytic leukemia. *Blood Cancer Journal*, 7(7):e585

IF(2017)=8.125

[12] Pešta M (2016) Unitarily invariant errors-in-variables estimation. *Statistical Papers*, 57(4):1041–1057

IF(2016)=0.727

[13] Peštová B, Pešta M (2015) Testing structural changes in panel data with small fixed panel size and bootstrap. *Metrika*, 78(6):665–689

IF(2015)=0.595

[14] Pešta M, Okhrin O (2014) Conditional least squares and copulae in claims reserving for a single line of business. *Insurance: Mathematics and Economics*, 56(1):28–37

IF(2014)=1.128

[15] Sochor M, Basová P, Pešta M, Dusilková N, Bartoš J, Burda P, Pospíšil V, Stopka T (2014) Oncogenic MicroRNAs: MiR-155, miR-19a, miR-181b, and miR-24 enable monitoring of early breast cancer in serum. *BMC Cancer*, 14(1):448

IF(2014)=3.362

[16] Hudecová Š, Pešta M (2013) Modeling Dependencies in Claims Reserving with GEE. *Insurance: Mathematics and Economics*, 53(3):786–794

IF(2018)=1.315

[17] Pešta M (2013) Total least squares and bootstrapping with application in calibration. *Statistics*, 47(5):966–991

IF(2013)=1.594

[18] Pešta M, Hudecová Š (2012) Asymptotic consistency and inconsistency of the chain ladder. *Insurance: Mathematics and Economics*, 51(2):472–479

IF(2012)=1.095

[19] Slavík O, Pešta M, Horký P (2011) Effect of grading on energy consumption in European catfish. *Aquaculture*, 313(1–4):73–78

IF(2011)=2.041

C2 Papers in Czech scientific journals

[1] Maciak M, Peštová B, Pešta M (2018) Structural breaks in dependent, heteroscedastic, and extremal panel data. *Kybernetika*, 54(6):1106–1121

IF(2018)=0.560

[2] Gerthofer M, Pešta M (2017) Stochastic claims reserving in insurance using random effects. *Prague Economic Papers*, 26(5):542–560

IF(2017)=0.409

[3] Pešta M (2013) Asymptotics for weakly dependent errors-in-variables. *Kybernetika*, 49(5):692–704

IF(2013)=0.563

[4] Pešta M (2011) Strongly consistent estimation in dependent errors-in-variables. *Acta Universitatis Carolinae: Mathematica et Physica*, 52(1):69–79

IF —, not indexed in WoS

[5] Kováčik M, Madarász Š, Bartko D, Pešta M, Herzig R, Kaňovský P (2010) Stroke and coronary artery disease. *Česká a slovenská neurologie a neurochirurgie*, 73/105(5):497–502

IF(2010)=0.393

C3 Papers in international peer-reviewed proceedings

[1] Peštová B, Pešta M (2019) Variance estimation free tests for structural changes in regression. In Bertail P, Cornillon P-A, Matzner-Lober E, Blanke D, eds, *Nonparametric Statistics*. 3rd ISNPS, Avignon, France, June 2016. Springer Proceedings in Mathematics & Statistics, Volume 250, pages 357–373. Springer, Cham, ISBN: 978-3-319-96940-4

[2] Peštová B, Pešta M (2018) Asymptotic and bootstrap tests for a change in autoregression omitting variability estimation. In Rojas F, Pomares H, Valenzuela O, eds, *Time Series Analysis and Forecasting*. ITISE 2017. Contributions to Statistics, pages 187–202. Springer, Cham, ISBN: 978-3-319-96943-5

[3] Peštová B, Pešta M (2018) Change point in panel data with small fixed panel size: ratio and non-ratio test statistics. In Pilz J, Rasch D, Melas VB, Moder K, eds, *Statistics and Simulation*. IWS 2015. Springer Proceedings in Mathematics & Statistics, Volume 231, pages 259–271. Springer, Cham, ISBN: 978-3-319-76034-6

[4] Pešta M, Hlávka Z (2017) Shape constrained regression in Sobolev spaces with application to option pricing. In Antoch J, Jurečková J, Maciak M, Pešta M, eds, *Analytical Methods in Statistics*. AMISTAT 2015, Prague, November 2015. Springer Proceedings in Mathematics & Statistics, Volume 193, pages 123–157. Springer, Cham, ISBN: 978-3-319-51312-6

[5] Peštová B, Pešta M (2017) Change point detection in autoregression without variability estimation. In Valenzuela O, Rojas F, Pomares H, Rojas I, eds, *Proceedings of the International work-conference on Time Series 2017*, vol. 2, pages 674–685. Godel Editorial, Granada, Spain, ISBN: 978-84-17293-01-7

[6] Peštová B, Pešta M (2017) Ratio tests of a change in panel means with small fixed panel size. In Rojas F, Pomares H, Valenzuela O, eds, *Advances in Time Series Analysis and Forecasting*. ITISE 2016. Contributions to Statistics, pages 223–240. Springer, Cham, ISBN: 978-3-319-55788-5

[7] Peštová B, Pešta M (2016) Change point detection in panel data with small fixed panel size. In Valenzuela O, Rojas F, Ruiz G, Pomares H, Rojas I, eds, *Proceedings of the International work-conference on Time Series 2016*, pages 194–205. Godel Editorial, Granada, Spain, ISBN: 978-84-16478-93-4

C4 Papers in Czech peer-reviewed proceedings

[1] Hudecová Š, Pešta M (2012) Generalized estimating equations in claims reserving. In Komárek A, Nagy S, eds, *Proceedings of the 27th International Workshop on Statistical Modelling*, pages 555–560. Tribun EU, Brno, Czech Republic, ISBN: 978-80-26302-51-3

[2] Pešta M (2009) Regression in Sobolev spaces using total least squares. In Antoch J, Dohnal G, eds, *Robust 2008*. Sborník prací 15. zimní školy JČMF ROBUST 2008, pages 343–350. JČMF, Prague, Czech Republic, ISBN: 978-80-7015-004-7

[3] Pešta M (2008) Total least squares approach in regression methods. In Šafránková J, Pavlů J, eds, *WDS'08 Proceedings of Contributed Papers: Part I – Mathematics and Computer Sciences*, pages 88–93. MatfyzPress, Prague, ISBN: 978-80-7378-065-4

[4] Pešta M (2006) Remarks on isotonic regression in Sobolev spaces. In Antoch J, Dohnal G, eds, *Robust 2006*. Sborník prací 14. zimní školy JČMF ROBUST 2006, pages 253–260. JČMF, Prague, Czech Republic, ISBN: 978-80-7015-073-4

D Textbooks

[1] Pešta M, Petrová B, Procházka J, Smolárová T, Zimmermann P (2016) *Exercises in Non-life Insurance*. NFVP, Prague, p. 223 [cit. 2019-08-28]
`michal.pesta.matfyz.cz/vse-mff.pdf`

E1 Submitted scientific papers

[1] Pešta M (2019) Changepoint in Linear Relations. *Submitted*
arXiv:1908.10628

[2] Maciak M, Okhrin O, Pešta M (2019) Micro forecasting. *Submitted*
arXiv:1908.10636

[3] Maciak M, Pešta M, Peštová B (2019) Changepoint in dependent and non-stationary panels. *Submitted*

[4] Pešta M, Peštová B, Maciak M (2019) Changepoint estimation for dependent and non-stationary panels. *Submitted*

[5] Maciak M, Pešta M, Vitali S (2019) Implied volatility surface estimation via quantile regularization. *Submitted*

[6] Oniščenko B, Pešta M, Hrnčíř E, Tlapák J (2019) The effect of breathing of normobaric hypoxic mixture with 12.6 kPa oxygen partial pressure on human psychomotor performance. *Submitted*

E2 Conference proceeding (editor)

[1] Antoch J, Jurečková J, Maciak M, Pešta M (2017) *Analytical Methods in Statistics*. AMISTAT 2015, Prague, November 2015. Springer Proceedings in Mathematics & Statistics, Volume 193. Springer, Cham, ISBN: 978-3-319-51312-6

F Patents

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H Dissertation thesis

[1] Pešta M (2010) *Modern Asymptotic Perspectives in Errors-in-Variables Modeling*. PhD Thesis, Charles University, Prague.

I Other publications

[1] Peštová B, Pešta M (2016) Erratum to: Testing structural changes in panel data with small fixed panel size and bootstrap. *Metrika*, 79(2):237–238
IF(2016)=0.637

Scientific Papers in Total

WoS 28 publications
141 citations (without self-citations)

Scopus 25 publications
167 citations (without self-citations)

Prague, December 30, 2019