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## **Studium v doktorském studijním programu**

### PUBLIKAČNÍ LIST

Jméno doktoranda:	Ing. Martin Dlask
Školitel, pracoviště:	doc. Ing. Jaromír Kukal, Ph.D., KSI FJFI, ČVUT
Školitel-specialista:	prof. Ing. Pavel Sovka, CSc., FEL ČVUT

### **Publikace se vztahem k tématu studie k disertační práci (popř. disertační práce):**

- **v impaktovaných časopisech**

M. Dlask and J. Kukal, “*Application of rotational spectrum for correlation dimension estimation*“, Chaos, Solitons and Fractals, vol. 99, pp. 256-262, 2017.

M. Dlask and J. Kukal, “*Hurst exponent estimation from short time series*“, Signal, Image and Video Processing, vol. 13, pp. 263-269, 2018.

M. Dlask and J. Kukal, “*Translation and Rotation Invariant Method of Renyi Dimension Estimation*“, Chaos, Solitons & Fractals, vol. 114, pp. 536-541, 2018.

M. Dlask and J. Kukal, “*Alzheimer disease diagnostics from EEG via Wishart distribution of fractional processes*“, Signal, Image and Videoprocessing, vol. 15, pp. 1435-1442, 2021.

M. Dlask and J. Kukal, “*Hurst exponent estimation of fractional surfaces for mammogram images analysis*“, Physica A, vol. 585, pp. 126424, 2022.

M. Dlask, J. Kukal, M. Poplova, P. Sovka and M. Cifra, “*Short-time fractal analysis of biological autoluminescence*“, PLOS ONE, vol. 14, pp. 1-17, 2019.

M. Dlask, J. Kukal and O. Vysata, “*Bayesian approach to Hurst exponent estimation*“, Methodology and Computing in Applied Probability, vol. 19, pp. 973-983, 2017.

- **v recenzovaných (neimpaktovaných) časopisech**

N/A

- **další publikace, výzkumné zprávy**

N/A

- **příspěvky na konferencích, ve sbornících abstraktů**

M. Dlask and J. Kukul, "Correlation dimension as a measure of stock market variability", *Proceedings of 35th International Conference Mathematical Methods in Economics*, pp. 119-124, 2017.

M. Dlask and J. Kukul, "Correlation Dimension Estimation from EEG Time Series for Alzheimer Disease Diagnostics", *Proceedings of the International Conference on Bioinformatics Research and Applications*, pp. 62-65, 2017.

M. Dlask, J. Kukul and P. Sovka, "Fractional Brownian bridge model for Alzheimer disease detection from EEG signal", *Proceedings of International Conference on Signal Processing and Information Security*, pp. 1-4, 2018.

M. Dlask, J. Kukul, and Q.V. Tran, "Revisited Zero- Crossing Method for Hurst Exponent Estimation in Time Series", *Proceedings of International Conference Mathematical Methods in Economics*, pp. 115-120, 2015.

M. Dlask, "Fractional Brownian bridge as a tool for short time series analysis", *Proceedings of International Conference Mathematical Methods in Economics*, pp. 149-154, 2016.

L. Tylova, M. Dlask, J. Kukul, and Q.V. Tran, "Could prediction error help in fractal analysis of time series?", *Proceedings of International Conference Mathematical Methods in Economics*, pp. 847-852, 2015.

M. Dlask, "Novel approach of fractal dimension estimation based on optimal segmentation of time series", *Workshop on Scientific computing*, Decin, 2015.

M. Dlask, "On the correlation dimension estimation using rotational spectrum", *Workshop of scientific computing*, Decin, 2016.

M. Dlask, "On the investigation of Julia sets using rotational spectrum", *Doktorandske dny*, Prague, 2016.

M. Dlask, "Application of correlation dimension for Alzheimer disease diagnostics", *Workshop on Scientific computing*, Decin, 2017.

M. Dlask, "Bayesian approach to Hurst exponent estimation", *Doktorandske dny*, Prague, 2017.

M. Dlask, "Translation and Rotation Invariant Method of Renyi Dimension Estimation", *Doktorandske dny*, Prague, 2018.

M. Dlask, "Rotational spectrum as a tool for Alzheimer disease diagnostics", *Workshop on Scientific computing*, Decin, 2019.

M. Dlask, "Short-time fractional analysis of biological autoluminescence", *Doktorandske dny*, Prague, 2019.

M. Dlask, "Maximum likelihood approach to Hurst exponent estimation of fractional time series", *Doktorandske dny*, Prague, 2020.

M. Dlask, "Application of multidimensional fBm in mammography screening", *Workshop on Scientific computing*, Decin, 2021.

**Publikace nevztahující se k tématu studie k disertační práci (popř. disertační práce):**

- **v impaktovaných časopisech**

N/A

- **v recenzovaných (neimpaktovaných) časopisech**

N/A

- **výzkumné zprávy**

N/A

- **příspěvky na konferencích, ve sbornících abstraktů**

N/A