

Contents

Weak Dependence: An Introduction Through Asymmetric ARCH Models	1
P. Doukhan and N. Mtibaa	
Subsampling for Non-stationary Time Series with Long Memory and Heavy Tails Using Weak Dependence Condition	17
Elżbieta Gajeczka-Mirek and Oskar Knapik	
Change-Point Problem in the Fraction-Of-Time Approach	35
Jacek Leśkow and Bartosz Stawiarski	
Seismic Signal Enhancement via AR Filtering and Spatial Time-Frequency Denoising	51
Marta Polak, Jakub Obuchowski, Agnieszka Wyłomańska and Radosław Zimroz	
Transformed GARMA Model with the Inverse Gaussian Distribution	69
Breno Silveira de Andrade, Jacek Leśkow and Marinho G. Andrade	
GARCH Process with GED Distribution	83
Małgorzata Wiśniewska and Agnieszka Wyłomańska	
A Residual Based Method for Fitting PAR Models Using Fourier Representation of Periodic Coefficients	105
Harry Hurd	
Vectorial Periodically Correlated Random Processes and Their Covariance Invariant Analysis	121
I. Javorskyj, I. Matsko, R. Yuzefovych and O. Dzeryn	
Periodically Correlated Sequences with Rational Spectra and PARMA Systems	151
Andrzej Makagon	

Fault Detection in Belt Conveyor Drive Unit via Multiple Source Data	173
Piotr Kruczek, Jakub Sokołowski, Jakub Obuchowski, Mateusz Sawicki, Agnieszka Wyłomańska and Radosław Zimroz	
Application of Independent Component Analysis in Temperature Data Analysis for Gearbox Fault Detection.	187
Jacek Wodecki, Pawel Stefaniak, Mateusz Sawicki and Radoslaw Zimroz	
Time-Frequency Identification of Nonlinear Phenomena for Mechanical Systems with Backlash	199
Rafał Burdzik, Łukasz Konieczny, Jakub Młyniczak, Piotr Kruczek, Jakub Obuchowski and Maciej Zawisza	
Vibration Signal Processing for Identification of Relation Between Liquid Volume and Damping Properties in Hydraulic Dampers.	213
Łukasz Konieczny, Rafał Burdzik, Jakub Młyniczak, Jakub Obuchowski, Piotr Kruczek and Dariusz Laskowski	
Modified Protrugram Method for Damage Detection in Bearing Operating Under Impulsive Load	229
Piotr Kruczek and Jakub Obuchowski	
Use of Cyclostationarity Based Condition Indicators for Gear Fault Diagnosis Under Fluctuating Speed Condition	241
Vikas Sharma and Anand Parey	

Cyclostationarity: Theory and Methods III
Contributions to the 9th Workshop on Cyclostationary
Systems and Their Applications, Grodek, Poland, 2016
Chaari, F.; Leskow, J.; Napolitano, A.; Zimroz, R.;
Wylomańska, A. (Eds.)
2017, VIII, 257 p. 115 illus., 97 illus. in color., Hardcover
ISBN: 978-3-319-51444-4