Accepted Manuscript

Properties of Asymmetric Detrended Fluctuation Analysis in the time series of RR intervals

J. Piskorski, M. Kosmider, D. Mieszkowski, T. Krauze, A. Wykretowicz, P. Guzik

PII: S0378-4371(17)30949-4
DOI: https://doi.org/10.1016/j.physa.2017.09.057
Reference: PHYSA 18662

To appear in: *Physica A*

Received date : 12 February 2017
Revised date : 17 August 2017

Please cite this article as: J. Piskorski, M. Kosmider, D. Mieszkowski, T. Krauze, A. Wykretowicz, P. Guzik, Properties of Asymmetric Detrended Fluctuation Analysis in the time series of RR intervals, *Physica A* (2017), https://doi.org/10.1016/j.physa.2017.09.057

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

ACCEPTED MANUSCRIPT

Highlights

- the Asymmetric Detrended Fluctuation Analysis method has been applied to the *RR* intervals time series
- it has been found that the scaling exponents for rising and falling trends differ systematically and unidirectionally with $\alpha^+ < \alpha^-$
- the proportion of time during which asymmetry in scaling exponents is observable is different from 0.5
- ADFA uncovers another aspect of Heart Rate Variability

ACCEPTED MANUSCRIPT

Download English Version:

https://daneshyari.com/en/article/5102378

Download Persian Version:

https://daneshyari.com/article/5102378

Daneshyari.com