## Statistic of Quasi–Periodical Signal with Random Period – First Application on Vocal Cords Oscillation



**NEUROINFORMATICS** Research Group

KROUPA, L., VÁVRA, F., NOVÝ, P. Statistic of Quasi–Periodical Signal with Random Period – First Application on Vocal Cords Oscillation. In *16th CONFERENCE ON APPLIMAT MATHEMATICS APLIMAT 2017 PROCEEDINGS*. Bratislava: Vydavate?stvo Spektrum STU, Bratislava, 2017. s. 905-911. ISBN: 978-80-227-4650-2

This paper will introduce problem of statistics of quasi-periodic signal in relation to detection of the vocal cords pathology from audio recording. Distribution function of period lengths and its relation to distribution function of immediate frequencies is defined and application on vocal cord diagnostic by classification of periods and frequencies to common (normal) and anomalous is devised.

31.01.2017

Bratislava