



Heart Rate Variability: Algorithms and Software Tools

Guest Editor:

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Message from the Guest Editor

Heart rate variability (HRV) can be defined as variations in time between contiguous heart beats. These variations are not constant, and they are regulated by factors extrinsic to the circulatory system, particularly by the nervous system. Thus, the analysis of the HRV allows evaluating, in both an indirect and noninvasive way, the state of the nervous system, and its sympathetic and parasympathetic components.

In the last few years, new analysis methodologies have been defined, new experiments to explain its physiological fundamentals have been developed, and clinical studies in various fields have been performed.

However, this is not a closed research field, and there are still problems that need to be solved: Nonstationary records, determining optimal measurement conditions, obtaining robust indexes, determination of normality, interoperability between measurement devices and applications, etc.

In this SI, we would like to receive contributions describing algorithms capable of improving heart rate signal recording and processing and obtaining robust HRV indexes ...

