

## CONTENTS

---

<i>Mariusz Flasiński</i> A survey on syntactic pattern recognition methods in bioinformatics . . . . .	5
<i>Mateusz Kocot, Krzysztof Misan, Valentina Avati, Edoardo Bossini, Leszek Grzanka, Nicola Minafra</i> Using deep neural networks to improve the precision of fast-sampled particle timing detectors . . . . .	43
<i>Bhupendera Kumar, Rajeev Kumar</i> Generalizing clustering inferences with ML augmentation of ordinal survey data . . . . .	63
<i>Jarosław Stańczak</i> Efficient selection methods in evolutionary algorithms . . . . .	95
<i>Dariusz Mikolajewski, Anna Bryniarska, Piotr Michał Wilczek, Maria Myslicka, Adam Sudol, Dominik Tenczynski, Michał Kostro, Dominika Rekałek, Rafał Tichy, Rafał Gasz, Mariusz Pełc, Jarosław Zygarlicki, Michał Koziol, Radek Martinek, Radana Kahankova Vilimkova, Dominik Vilimek, Aleksandra Kawala-Sterniuk</i> The most current solutions using virtual-reality-based methods in cardiac surgery – a survey . . . . .	123
<i>Miłosz Zdybał, Marcin Kucharczyk, Marcin Wolter</i> Machine learning based event reconstruction for the MUonE experiment clustering algorithms . . . . .	147