## **PREFACE**

The 4<sup>th</sup> Jagiellonian Symposium on Advances in Particle Physics and Medicine was organised by the Jagiellonian University in Kraków, Poland. The conference took place on July 10–15, 2022 in Collegium Maius, the oldest building of the University founded in XIV century, as well as in the Collegium Novodvorscianum.

Following the success of three meetings organised in 2015, 2017, and 2019, this event was a continuation of once again bringing together scientists from physics, nuclear medicine, and healthcare.

One of the main purposes of the Jagiellonian Symposium was to exchange experience and expertise gained by people from various institutions in the fields of nuclear and particle physics, medical imaging, radiotherapy, and diagnostics. The symposium was a showcase for forefront experimental as well as theoretical developments, where the interplay between outstanding research and innovative concepts on the borderline between basic and applied science was promoted.

The scientific scope covered the following fields:

- Preclinical imaging
- Clinical imaging
- Positronium in medicine
- Total-body PET
- Positronium in physics
- Particle-detection technologies
- Particle therapy
- Exotic atoms and nuclei
- Radiopharmaceuticals
- Artificial intelligence for medicine
- PET imaging innovations

Conference Proceedings have been published in this issue of *Acta Physica Polonica B Proceedings Supplement* as well as in *Acta Physica Polonica A* and *Bio-Algorithms and Med-Systems*.

Bartosz Leszczyński Sushil Sharma Magdalena Skurzok