

Proceedings of
the 5th Jagiellonian Symposium on
Advances in Particle Physics and Medicine

Kraków, Poland, June 29–July 7, 2024

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POLISH ACADEMY OF SCIENCES
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We acknowledge support by:

- Foundation for Polish Science through the TEAM POIR.04.04.00-00-4204/17 programme
- National Science Centre of Poland through grants nos. 2019/33/B/NZ3/01004, 2019/35/B/ST2/03562, 2021/42/A/ST2/00423, 2021/43/B/ST2/02150, 2022/47/I/NZ7/03112 and 2022/45/B/NZ7/01430
- SciMat and qLife Priority Research Areas budget under the program *Excellence Initiative — Research University* at the Jagiellonian University

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Participants of the *5th Jagiellonian Symposium on Advances in Particle Physics and Medicine* in the Collegium Novodvorscianum Aula



Participants of the *5th Jagiellonian Symposium on Advances in Particle Physics and Medicine* in the Collegium Novodvorscianum Courtyard

Preface

The *5th Jagiellonian Symposium on Advances in Particle Physics and Medicine* was organized by the Jagiellonian University in Kraków, Poland. The conference took place from June 29 to July 7, 2024, at the Collegium Novodvorscianum.

Following the success of four meetings organized in 2015, 2017, 2019, and 2022, this event was their continuation to once again bring together scientists from physics, nuclear medicine, and healthcare.

One of the primary objectives of the Jagiellonian Symposium was to exchange experience and expertise gained by representatives of various institutions specializing in the fields of nuclear and particle physics, medical imaging, radiotherapy, and diagnostics.

The present Symposium showcased cutting-edge experimental and theoretical developments, promoting the interplay between outstanding research and innovative concepts at the intersection of basic and applied science.

The scientific scope covered the following fields:

- Total-body PET,
- PET imaging innovations,
- Novel pharmaceuticals for theranostics,
- Extracellular vesicles for theranostics,
- Scandium for PET,
- Brain-PET innovations,
- Artificial intelligence for medicine,
- Positronium in medicine,
- Positronium in fundamental and material physics,
- Particle detection technologies,
- Particle therapy monitoring,
- Exotic atoms and nuclei, nuclear physics.

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

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Guest Editors