



JPS Anniversary Years 2025–2027 Kick-Off!

Shuji Hasegawa (The 80<sup>th</sup>-term President of JPS)

As we welcome the New Year of Reiwa 7 (2025), I wish all members and affiliate members (Kaiyu) of JPS a fruitful and fulfilling year ahead.

The year 2025 marks the UNESCO-designated International Year of Quantum Science and Technology, commemorating the 100th anniversary of the matrix mechanics paper by Heisenberg and others. Next year, 2026, will be the 80th anniversary of our society's establishment, and in 2027, we will celebrate the 150th anniversary of the founding of the Tokyo Mathematical Society, which later evolved into the Japan Mathematico-Physics Society. These consecutive milestone years offer us an extraordinary opportunity to reflect on the history of physics, anticipate future advancements, and strengthen the connection between physics and the public for future generations. In 2024, we established the Special Committee for Commemorative Projects in collaboration with the Public Relations Committee to prepare the initiatives described below. The purpose and details of these projects are outlined on our website (https://www.jps.or.jp/english/about-jps/150th/prospectus.html). With these commemorative years as a catalyst, we aim to enrich our activities through the following four perspectives:

#### 1. Physics as Culture

### • Establishing "Physics Day":

We invited suggestions via the members' and Kaiyu' mailing lists regarding which date should be designated as "Physics Day." Within just one week, over 100 ideas were submitted, with many more received since. We are now conducting a vote among members and Kaiyu to decide on the final date, of which result will be announced at the Annual General Meeting on March 31, 2025. We hope Physics Day will serve as a cornerstone for outreach activities, continuing well beyond these commemorative years.

#### • Quantum Fest:

A celebration of quantum physics through music and visuals will be held at the National Museum of Emerging Science and Innovation (Miraikan) on June 14–15, 2025, in collaboration with the Japan Society of Applied Physics. The symphony to be performed is inspired by "quantum" concepts. Funding will be raised via crowdfunding, open to all (not limited to members or Kaiyu). Supporters will receive thank-you gifts, with options to attend the live performance based on donation amounts. Videos of the event will also be made available to members and Kaiyu on a dedicated webpage.

#### • "Physics Karuta" and Commemorative Goods:

We have created original goods in collaboration with partner companies, such as a physics-themed "karuta", a traditional Japanese card game. Examples include:

- o "A" for "Attraction between you and me: universal gravitation."
- "U" for "Universe explored by gravitational wave telescopes."

These items aim to introduce physics in a fun and engaging way to people of all ages, from children to adults. Other items include original tumblers and notebooks, which will also be offered as crowdfunding rewards.

#### 2. Physics for Youth and the Public

• Special Issue of Science Magazine "Newton":

The February 2025 issue of *Newton* will feature a special edition on 100 years of quantum mechanics, developed with input from our members.

# • Exhibitions at Miraikan and the National Museum of Nature and Science:

These exhibits will focus on quantum physics, astrophysics, and quantum computing, guided by the advice of our members.

• "Physics Wall Newspapers":

A wall newspaper packed with the latest research, fundamental physics, and career paths for physics graduates will be created and distributed regularly to high schools nationwide.

# • "Physics Quiz":

To inspire interest in physics among students and the public, quizzes will be posted on our website, social media, and journal. We aim to develop these quizzes into a "Physics Certification Exam."

## • Peace Declaration:

In collaboration with the German Physical Society (DPG), we plan to issue a declaration emphasizing the historical relationship between physics and war, as well as the responsibilities and commitments of physics researchers.

#### 3. Learning from History

## • Designating "Physics Heritage":

We will identify and preserve items of historical significance in physics, such as experimental apparatuses, manuscripts, notes, locations, and buildings. A digital archive will also be developed to support these efforts.

#### • Historical Articles:

Articles on the history of physics and physics education in Japan, as well as the history of our society, will be serialized in our journals and later compiled into a book.

### 4. Expanding the Frontiers

## • Online Physics Glossary:

To address the proliferation of new technical terms, we are creating an online glossary with English and Japanese terminology with brief explanations. This project will continue beyond the commemorative years.

## • Publishing English-Language Textbooks:

Many excellent physics textbooks have been published in Japan, ranging from undergraduate to advanced levels. We plan to collaborate with international publishers to release translated and expanded versions, strengthening global outreach.

## • Hosting an International Conference:

Surprisingly, our society has never hosted an international conference covering all areas of physics. Discussions are underway to make the 2027 Annual Meeting an international conference, with the registration fee remaining at \$8,000. If realized, we plan to host a grand banquet during the conference to honor our predecessors who have passed the baton to us.

Some of these initiatives are already underway, while others are still in the planning stages. Through these commemorative years, we aspire to significantly expand our activities and impact. We greatly appreciate understanding and cooperation from our members and Kaiyu.