#### Action Plan of the Doctoral School of Physics for the Period 2025-2029

### 1) Ensuring Core Member Compliance

The Doctoral School of Physics currently has four full professors, two research professors, and one associate professor as core members. None of the full professors will reach the age of 70 by 2029, therefore all of them continue to meet the required criteria. Prof. Dr. János Hebling will be registered as a core member emeritus as of April 1, 2026, following his appointment as Professor Emeritus. By 2029, three new full professorship appointments are expected among the younger members of the Doctoral School (Institute of Physics): Dr. György Tóth, Dr. Gábor Paragi, and Dr. Zoltán Tibai.

### 2) Leadership of the Doctoral School

According to the Operational Regulations of the University Doctoral Council (EDT) of the University of Pécs (PTE), the head of a doctoral school must be a full professor holding the title Doctor of the Hungarian Academy of Sciences (D.Sc.). The current head of the Doctoral School of Physics meets this requirement until 2046, therefore no change in leadership is expected for a long time.

## 3) Representation of Programs in the Doctoral School Council

Currently, the Laser Physics, Nonlinear Optics, and Applied Physics Program is represented in the Doctoral School Council (FizDI Council) by three full professors and one associate professor (all of whom are core members). The Quantum Optics and Quantum Informatics Program is represented by one full professor and one associate professor (both core members). The program leader, Dr. Péter Ádám, has applied for full professorship, with appointment expected in 2026. The Science Teacher Training Program is represented by one full professor (a core member) in the Council. Our realistic goal is that by the end of the next five-year period, each program will be represented by at least two full professors who are core members.

# 4) Requirements for the Doctoral Degree

The current degree requirements of the Doctoral School of Physics ensure the high standard of the PhD degree. In the case of the Science Teacher Training Program, the requirements differ from those of the other two programs due to the specific nature of the field. If necessary in the future, steps will be taken toward a greater harmonization of the program requirements.

# 5) Transformation of the Training Program

The training program has been continuously adapted to reflect changes in student interests, program structures, and teaching staff — including departures and new members joining the school. In recent years, there has been a growing interest among applicants in experimental work. However, in some cases, students with excellent theoretical skills and strong general backgrounds have shown insufficient practical competence. Therefore, we plan to introduce new courses aimed at developing general laboratory skills.

This Action Plan was discussed and approved by the Council of the Doctoral School of Physics (FizDI) at its meeting on September 29, 2025.