

# SUMMARY

## I. Current status

The situation of the Institute is basically good; however, several risk factors have to be taken into account. Fortunately, in teaching the decreasing trend in the number of science students does not hold in our case, while in research the Physics Institute has a strong position in grants in Hungary. The financial balance of the Faculty strongly relies on the fluctuating grant money and the non-decreasing number of students (normative financing). At the same time, the increase of the state paid tuition fee improves our balance for the next two years.

### II/1. Teaching

The last reform of education has greatly reduced the contact workload of students, however, we have not managed to provide enough projects for the motivated students. The goal is to make a transition toward a more interactive, practical, self-directed training, where students (both the talented and the average ones) can progress to the level of their knowledge. While in the previous cycle the target was mainly to retain the failing students, now we should move to the next step, helping the more motivated students with e.g. structures like "Honors College".

### II/2. Teachers' training

The volume of teachers' training is below the replacement level of retiring physics teachers; therefore, we should be able to address as many students interested in physics as possible and steer them to our teacher programs. In order to reduce the shortage in the number of teachers, a great emphasis should also be placed on the promotion of this course and recruitment. As the average basic mathematical knowledge of the students here is low, it is necessary for them to have independent exercises (not combined with the ones in physics), and in the case of the basic subjects it is necessary to move towards deeper physical understanding and applicability.

### II/3. Research

The Institute has a strong position in "Lendület" and ERC grants. This is a very good trend which we should keep. Our OTKA activity is also significant, which helps to maintain the diversity of our research portfolio. New positions should be advertised as widely as possible and filled by through an open contest, continuing the current trend. A more frequent and intensive exchange of current research results between the research groups within the whole Institute should be encouraged.

## IV. Staff policy

A predictable career as a lecturer / researcher requires a transparent promotion plan, and the preparation of a common institutional development plan pointing out the priority directions. In the field of education, it would be desirable to develop teaching methods as well. In educating young people, we should, where possible, provide an opportunity to involve interested high school students in research, e.g. joining the program of Wigner RCP.

## V. External relations

We need to maintain our good relations with the research institutes (Wigner RCP, MTA Centre for Energy Research) based on educational and research collaborations. The new scientific data analytics MSc training opens opportunities towards the industry.

We need to continue and strengthen the "recruitment", making our training goals more visible on the website of the Institute, pointing out the progress towards MSc and doctoral training, and the employment opportunities with a degree in physics. We should involve our students in the recruitment activity by helping them visiting their high schools and providing them with materials to reach the students there.

## **VI. Administration**

The aim is to make the change of director of the institute as smooth a process as possible and to reach a common vision of our future. We should do everything possible to fight the horrible bureaucracy at the university, and make it “invisible” to the staff, and value and help those, who are working on it every day. I ask everyone to stay active and work together to improve our Institute in all the fields of its activity.