With the power of knowledge – for the world

Helsinki Institute of Physics (HIP)
Action Plan for 2021
in the 2021–2024 period

(24 November 2020)

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1 STRATEGIC FRAMEWORK

1.1 CHANGING ENVIRONMENT

The Helsinki Institute of Physics (HIP) is jointly operated by five Finnish universities, with the Finnish Radiation and Nuclear Safety Authority (STUK) as a fixed-term interim member. Thanks to its structure as a jointly operated institute, HIP provides an operational and financial framework for the utilisation of large international research infrastructures, which would be impossible if it were operated by a single university. HIP's national role also means that it can serve in the steering and decision-making bodies of international research institutes. The Helsinki Institute of Physics coordinates Finnish cooperation with the European Organization for Nuclear Research (CERN) and the Facility for Antiproton and Ion Research in Europe (FAIR).

HIP receives Ministry of Education and Culture funding for the performance of national duties, earmarked for international activities and related support. Funding for national duties in the 2021–2024 period will decrease by 26% compared to the previous strategic period. This decrease will be compensated for with more funding from HIP's member universities. The funding for national duties in the 2021–2024 period will cover approximately 60% of core funding, while the member universities' funding will cover approximately 40%. External funding will be obtained from, for example, the Academy of Finland, Business Finland and the EU.

Finland's national CERN strategy (Academy of Finland 13/2002) and the Update of the European Strategy for Particle Physics, published on 19 June 2020, provide a foundation for long-term and diverse work in the development of research, doctoral education, technology development and transfer, as well as societal impact. Relevant international documents also include CERN's Medium-Term Plan for the period 2021–2025, NuPECC's Long Range Plan 2017 and APPEC's European Astroparticle Physics Strategy 2017–2026.

During the 2021–2024 strategic period, CERN's construction activities will focus on the construction of the High Luminosity LHC, alongside Run 3. HIP is coordinating Finland's contribution to the construction of FAIR from 2011 to 2025 and to FAIR research activities.

The most significant challenge for HIP relates to the securing of long-term funding. Operational risks include unexpected events in major international projects and delays in the construction and operation of research equipment. Sudden changes in the funding of long-term international activities as well as exchange rate movements also constitute a significant threat.

1.2 MISSION

The Helsinki Institute of Physics is a joint research institute between the University of Helsinki, the University of Jyväskylä, Tampere University, the Lappeenranta-Lahti University of Technology and Aalto University, with national duties. HIP operates in connection with the University of Helsinki.

HIP's mission is to carry out and promote basic and applied research in theoretical and experimental physics, develop technology related to particle accelerator centres, and to educate researchers in physics. HIP is responsible for Finnish collaboration with CERN and engages in other international research collaboration. HIP also coordinates the Finnish contribution to the

Facility for Antiproton and Ion Research (FAIR) being constructed between 2011 and 2025 in Darmstadt, Germany, and to the research carried out at FAIR. HIP can also coordinate other international cooperation projects in subatomic physics that are relevant for Finland.

1.3 Profiles and focus areas

HIP's primary mission is based on Finland's status as a member state of CERN and FAIR and the full exploitation of this status. The main goals of the CERN and FAIR activities are as follows:

1. Prominent participation in international cooperation in cutting-edge basic research on high-energy physics and nuclear physics
2. Promotion of applied research on accelerators, radiation detectors and computing
3. Doctoral education in physics and new technology in a challenging international, project-based research environment
4. Promotion of the technological expertise of Finnish companies as well as the commercial exploitation of CERN and FAIR projects
5. Utilisation of CERN and FAIR in natural science education and promotion of general knowledge about the natural sciences

HIP's activities and research questions are closely connected to the European Strategy for Particle Physics as well as the other strategies and plans referred to in section 1.1. The activities are also guided by the strategies and focus areas of the member universities.

HIP's impact will be enhanced by further developing industrial cooperation between Finland, CERN and FAIR, promoting open science and the science activities of schools, and working actively with new partners for the exploitation of research results.

1.4 STRATEGIC CHOICES AND OBJECTIVES

HIP strategic map 2021–2024 (*HIP objectives in bold and italics)*:

KNOWLEDGE AND LEARNING ARE FOR EVERYONE

1. A multidisciplinary scientific partner of international standing
2. Research-based knowledge in support of societal decision-making
3. High-quality, up-to-date research infrastructures
4. Open science – openly available research infrastructures and materials
5. Competence in the analysis and management of open datasets
6. Facilities fit for their purpose
7. A strong connection between teaching and research
8. An attractive provider of master's and doctoral education
9. Smooth student progress
10. An important science educator and communicator
11. An acknowledged, attractive and accessible environment of continuous learning

OPENNESS ENHANCES SCIENTIFIC RESEARCH AND COLLABORATION

12. A strong global influence
13. Active and full community participation regardless of language or cultural background
14. Virtual and physical international mobility
15. An influential social force
16. Business collaboration and innovation
17. *Academic freedom and inclusivity*

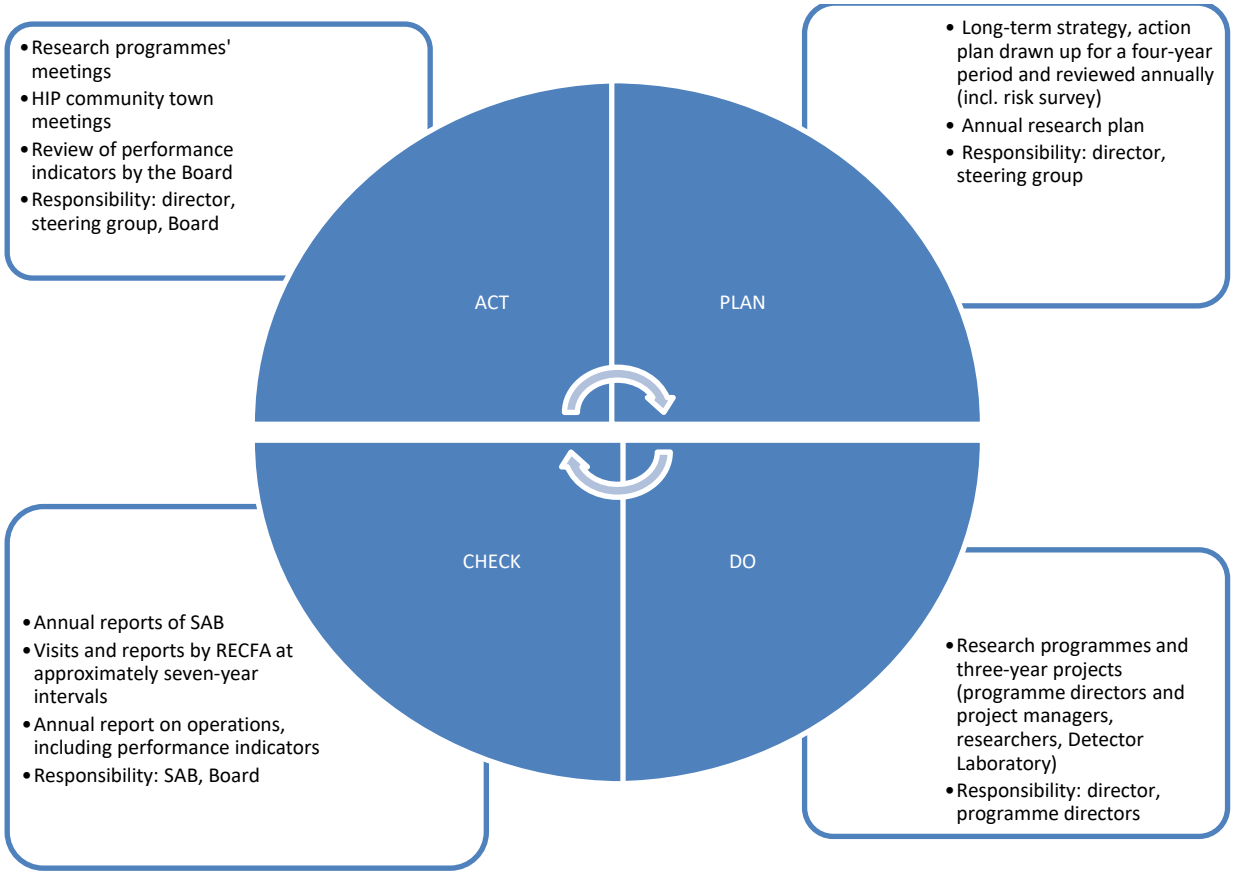
THE BEST PLACE TO STUDY AND WORK

18. A thriving work and study community
19. An attractive employer

A LEADER IN RESPONSIBILITY AND SUSTAINABILITY

20. Responsibility and sustainability integrated into operations culture
21. An international hub of sustainability science and teaching
22. Increased financial leeway

1.5 Quality management



A quality management system supports the achievement of the objectives set for the Helsinki Institute of Physics. The achievement of objectives is monitored through reporting and unit-specific feedback as a part of the operations management process. HIP's activities are guided by its regulations (8 January 2020), rules of procedure (7 October 2020) and operations manual.

The director is responsible for the quality of HIP's activities and results. The research programme directors are responsible for the scientific content of the programmes. The research coordinator serves as the contact person for matters related to quality and coordinates quality management at HIP. The director and the Board are supported in research quality issues by a 6–10-member international Scientific Advisory Board (SAB) which monitors the progress and scientific quality of research projects. SAB meets at least once a year, and its members can also be consulted in specific questions.

Research activities are organised into projects (usually for three years) which are evaluated by an assessor or a group of assessors before a decision is made on the approval or continuation of the project. The reports of external assessors are also provided to SAB. The Board takes SAB's recommendations into account when deciding on new projects.

HIP's research activities are also evaluated in research assessments carried out by the member universities. In the research assessment exercise of the University of Helsinki in 2019, the University of Helsinki part of HIP received the highest grade (excellent) for all areas assessed (scientific quality, societal impact, research environment and unit viability).

The Restricted Committee for Future Accelerators (REFCA) most recently assessed research on particle physics in Finland in 2017.

The majority of the activities take place in international accelerator laboratories, particularly at CERN. The activities are based on quality management systems, such as the ISO 9000 system. The Detector Laboratory at Kumpula Campus has a quality management plan based on the ISO 17025 standard.

Publishing in peer-reviewed journals guarantees the continued high quality of research. Monitoring as part of international joint projects provides added value for the maintenance of research quality. Examples include CERN's scientific assessment committees.

1.6 Risk assessment and management

Provided in a separate Excel workbook. The Detector Laboratory has its own risk management plan.

1.7 National special duties, international and academic special responsibilities, coordination of networks

Responsibility for the coordination of Finland's CERN activities
Start date: 1 September 1996
End date:
Resources: Funding for national duties, core funding of member universities and external funding for construction investments
Description:
CERN is the world's leading, highly diverse research centre for particle and nuclear physics. The organisation's 23 member states collaborate in global research projects which are carried out on a larger scale than would be possible for a single European country and are focused on the basic structure of matter and fundamental interactions in nature. CERN's latest major project, the Large Hadron Collider (LHC), is the world's largest scientific instrument. It was taken into research use in 2010 and has since contributed to our understanding of the origin of mass of subatomic particles (Higgs boson). CERN's other experimental activities include the Isotope mass Separator On-Line (ISOLDE) facility, which is the leading facility dedicated to the production of radioactive ion beams, as well as the CLOUD experiment, which shines new light on climate change. CERN is also a significant technological development platform.

As part of the funding awarded to the University of Helsinki, the Ministry of Education and Culture provides the Helsinki Institute of Physics with significant funding for the performance of national duties so that HIP can engage in CERN activities. CERN is included in Finland's national research infrastructure roadmap. The upgrade of the LHC to the High-Luminosity LHC (HL-LHC) is also an ESFRI Landmark project.

Responsibility for the coordination of Finland's FAIR activities
Start date: 1 January 2008
End date:
Resources: Funding for national duties, core funding of member universities and external funding for construction investments
Description:
The Facility for Antiproton and Ion Research (FAIR) is a particle accelerator laboratory established in Darmstadt, Germany, which will produce high-energy and high-intensity ion beams and antiproton beams. Ion beams enable advanced research in four different fields of physics. The accelerator complex contains cooler-storage rings for particle beams and enables the use of internal targets for research purposes. Two superconducting synchrotrons generate primary ion beams up to uranium nuclei, along with a wide range of radioactive ion beams.

The mission of the Helsinki Institute of Physics is to coordinate Finland's contribution to the construction and research activities. The Ministry of Education and Culture has granted the project €5 million in construction funding. In addition, the Academy of Finland's Finnish Research Infrastructure Committee made a policy decision in September 2015 concerning the allocation of funding for the FAIR construction expense payments due in 2019 and 2022. In December 2018 the Committee awarded €840,000 of funding for the first payment. The first FAIR research phase, Phase-0, began in 2019, utilising GSI infrastructure. FAIR is included in Finland's national research infrastructure roadmap. It is also an ESFRI Landmark project.

2 DEVELOPMENT MEASURES 2021–2024

The key development measures to be carried out in 2021 are:

2.1 STRATEGIC CHOICE 1: KNOWLEDGE AND LEARNING ARE FOR EVERYONE

Objective 1. A multidisciplinary scientific partner of international standing

Performance of national duties

The role of Finland as a CERN and FAIR member state will be comprehensively coordinated and utilised. The main duty of the Helsinki Institute of Physics will be to coordinate the cooperation between Finland and CERN. This duty is based on Finland's national CERN strategy (Academy of Finland 13/2002). The Helsinki Institute of Physics will coordinate Finland's contribution to the construction and research activities of the FAIR research infrastructure.

Comprehensive research activities relating to CERN experiments

The focus of research during the current period is on physics research using the Large Hadron Collider (LHC) and on the full exploitation of the results. The next phase of the LHC experiments – Run 3 – involving the collision of particles will take place from 2021 to 2025. Physics analyses will concentrate on the determination of the properties of the Higgs boson, jet studies, forward physics and relativistic heavy-ion collisions in CMS, TOTEM and ALICE experiments.

Radioactive ion beams will be produced at CERN's Isotope mass Separator On-Line facility (ISOLDE) for research on the nuclear structure.

HIP will continue its successful participation in CERN's CLOUD experiment, which focuses on climate change. The 10-year plan for the CLOUD experiment extends to 2030.

Increasing utilisation of Finland's FAIR membership

The construction of the FAIR accelerator centre in Darmstadt, Germany, is expected to be completed in 2025. FAIR's research activities have been gradually initiated during the construction period. Finland plays a prominent role in the construction process and the Phase-0 physics experiments.

The utilisation of FAIR will be measured in the number of in-kind deliveries during the construction phase and, when the centre is completed, increasingly in the number of publications on FAIR experiments as well as coordination responsibilities for the experiments.

Participation in ESA's Euclid mission

Preparations for the Euclid mission of the European Space Agency (ESA) will be made and a satellite constructed from 2020 to 2022. The launch of the Euclid satellite has been scheduled for 2022. As of 2022, the mission data will be analysed and measured. One of the nine Euclid data centres is located in Finland. HIP researchers play a key role in preparing the mission.

Utilisation of the APPEC membership

At the recommendation of its Scientific Advisory Board, HIP became a member of the Astroparticle Physics European Consortium (APPEC) in the beginning of 2019, and now serves as Finland's representative in APPEC. The APPEC membership helps to bridge the gap between the particle physics and astrophysics communities in Finland, while also creating synergies. The membership also helps to establish new international contacts and increases Finland's opportunities to influence international strategic planning in astroparticle physics regarding major scientific projects.

HIP participates in the preparation of ESA's and NASA's LISA mission. According to a preliminary timetable, the satellite will be launched in 2034.

Financial opportunities to participate in the COSINUS experiment will be explored.

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Participation in CERN and FAIR experiments requires high-level research staff and technical staff as well as financial resources. Peer-reviewed publications and the coordination of physics experiments will serve as the key performance indicators.

Objective 3. High-quality, up-to-date research infrastructures

Design, construction and upgrade of large detectors at CERN and FAIR

The first phase upgrade of CERN's ALICE experiment was completed in 2018.

The research and development required by the second phase upgrade of the CMS and ALICE experiments from 2016 to 2025 will be specified in concrete terms together with the experiment collaborators. In January 2018, these received Academy of Finland research infrastructure funding for the 2019–2021 period.

After Run 3, as of around 2025, the LHC experiments (CMS, ALICE, TOTEM) and the LHC accelerator will be upgraded for the HL-LHC phase.

Detector and accelerator components will be built and/or supplied for the FAIR centre, if possible collaboratively with Finnish companies.

During the 2021–2025 strategic period, HIP's FAIR activities will be expanded with the initiation of the Phase-0 experiments in 2020.

The activities of the Detector Laboratory as an independent infrastructure that supports research programmes cost-efficiently and professionally will be further developed.

The computation systems required by the LHC experiments will be further developed together with CSC and NeIC, transitioning increasingly to cloud-based resources.

Objectives 4 and 5.
Open science – openly available research infrastructures and materials
Open data analytics and management

Pioneer of open science

HIP researchers have played a pioneering role in the publication of open data concerning CERN's CMS experiment. HIP supports the provision of open access to the CMS data, the use of these data for scientific and societal purposes, and the long-term preservation of the data. Kati Lassila-Perini, HIP's Education and Open Data project leader, coordinates the Data Preservation and Open Access project associated with CERN's CMS experiment.

Providing open access to the CMS data will strengthen the connection between theoretical and experimental research. Theoretical researchers outside the experimental collaborations can use the open, experimental data in their research.

Almost all HIP publications are published openly. The key indicator used is the share of open access publications among peer-reviewed publications as well as the provision of open access to new datasets.

Objectives 7 and 8.
A strong connection between teaching and research
An attractive provider of master's and doctoral education

Guidance of students in the adoption of a research-based work method in an international environment

The Helsinki Institute of Physics provides excellent opportunities for doctoral education in a challenging international, project-based environment. In accordance with Finland's CERN strategy, doctoral education relating to CERN and FAIR will be intensified together with doctoral schools at the member universities. The topics of doctoral education will cover both basic research and the development of research-related equipment and methods as well as applications. HIP researchers participate actively in doctoral education.

CERN Accelerator Schools are organised in Finland in collaboration with HIP. HIP actively contributes to the organisation of Nordic laboratory workshops in instrumentation. HIP researchers coordinate the participation in the European School of Instrumentation in Particle & Astroparticle Physics (ESIPAP).

Traineeships and teaching through inter-university collaboration at CERN

Each year, approximately 15 students from Finnish universities and other higher education institutions participate in HIP's summer traineeship programme at CERN and ESRF. The summer trainees typically acquire three months of international work experience and have the opportunity to participate in top-level scientific lectures aimed at the trainees.

The CERN Bootcamp, intended for master's students, was organised together with three universities of applied sciences in summer 2018 and 2019, and another bootcamp is being planned for summer 2021. During the bootcamp, students work in groups to resolve current societal problems that often relate to sustainability.

Objective 10. An important science educator and communicator
School activities and use of open data (See also Objective 20.)

Each year, the Helsinki Institute of Physics organises continuing education for Finnish subject teachers as well as science camps for Finnish general upper secondary school pupils at CERN. HIP's three-year Education and Open Data project is responsible for the above activities and their development. The project uses CERN's open data in comprehensive and general upper secondary education and trains Finnish teachers throughout Finland in the use of open data and tools.

Before participating in CERN's science camps, the general upper secondary school pupils visit the University of Helsinki or the University of Jyväskylä for lectures and a laboratory tour. Annually, some 370 general upper secondary school pupils and 60 teachers participate in the camps. Numerous school groups visit the Detector Laboratory each year, and HIP researchers lecture at schools.

HIP researchers also organise annual international Masterclass courses coordinated by CERN for Finnish general upper secondary school pupils. In addition, HIP annually hosts pupils completing work experience periods.

Outreach activities

HIP researchers actively participate in a wide range of outreach activities targeted at the general public.

2.2 STRATEGIC CHOICE 2: OPENNESS ENHANCES SCIENTIFIC RESEARCH AND COLLABORATION

Objective 14. Virtual and physical international mobility

Use of digital solutions by a geographically distributed research institute

HIP's decentralised organisation structure emphasises mobility. HIP provides researchers working in Finland with access to leading international research centres, such as CERN and FAIR. Digital tools will be increasingly used to promote research synergies and a sense of community and inclusivity. This will also reduce HIP's carbon footprint.

Objective 15. An influential social force

Social impact of cooperation with the Radiation and Nuclear Safety Authority

The participation of the Radiation and Nuclear Safety Authority (STUK) in the Helsinki Institute of Physics increases HIP's engagement with and impact in Finnish society. Shared areas of research and other operations with STUK include radiation detector development and instrumentation, technology transfer and accelerator-based therapy.

The cooperation is important for STUK's main themes (Safety, Security and Safeguards): the social acceptance of nuclear energy and radiation use relies on safety, security against illegal activities and safeguards.

Objective 16. Business collaboration and innovation

Promotion of business collaboration and CERN/FAIR procurements

HIP will continue to promote technology development and transfer in the 2021–2024 period. Thanks to the HIP collaboration, Finnish universities are currently involved in several Business Finland Co-Creation projects related to CERN, in addition to which they are involved in and preparing various Co-Innovation projects related to CERN.

HIP will develop Finnish industrial cooperation with CERN and FAIR and will promote their technological and commercial utilisation. Industrial activation will be further developed.

HIP will support efforts to appoint a national industrial liaison officer for CERN and FAIR procurements. Support measures can significantly increase the in-kind deliveries from Finnish industry to CERN and FAIR. The return coefficient is a clear indicator of Finnish industrial supply contracts with CERN.

HIP's technology programme is structurally divided into three thematic areas: systems, materials and technology. The activities support CERN's and FAIR's experiments and accelerator development, and also have application potential in other major scientific projects, such as ESFR, ITER and XFEL. External funding and new partners (IAEA, CEA and VTT) will be actively sought for projects. Collaboration with Finnish businesses will be increased, and industrial activation projects will be launched with support from Business Finland.

2.3 STRATEGIC CHOICE 3: THE BEST PLACE TO STUDY AND WORK

Objective 18. A thriving work and study community **(See also Objective 20.)**

Measures taken by the Physics work wellbeing group

Objectives and measures of the work wellbeing group for physics at Kumpula Campus in the 2021–2024 period:

By 2024 the wellbeing of members of the University community has improved and progress has been made in the areas of equality, non-discrimination and opportunities for influence and impact.

To promote wellbeing and the sense of safety and security, the Physics work wellbeing group will:

- Be accessible and designate easily approachable contact people for the community
- Inform the community about the group's services and the people who can be contacted in various situations
- Implement and promote the Kumpula Campus Code of Conduct: https://www.helsinki.fi/en/faculty-of-science/faculty/kumpula-campus-code-of-conduct
- Promote equality and ethnic diversity in the community

Based on a stress survey carried out by the Physics work wellbeing group, it proposes the following concrete measures:

1. Organise open discussion sessions to share good practices and experiences and improve the work atmosphere of individual groups
2. Promote a positive collective spirit at HIP by organising various social activities, such as physics colloquia, spring boating trips and social events for research groups, including mushroom foraging, exercise, yoga, and board game and film nights
3. Organise welcome sessions for new members of the community, also in collaboration with other wellbeing groups
4. Participate actively in the wellbeing events of the University of Helsinki Faculty of Science and cooperate with other wellbeing groups to establish a warm and friendly atmosphere on Kumpula Campus

The implementation of measures and the promotion of common human values in the scientific community require collaboration with HR as well as financial support to carry out surveys, invite speakers and organise small-scale events. The implementation of measures will be monitored through the participation rate of HIP community members in events as well as surveys at the mid-point and end of the strategic period, in 2022 and 2024.

Objective 19. An attractive employer

Access to major international projects and research infrastructures

HIP provides researchers working in Finland with access to leading international research centres, such as CERN and FAIR.

National research cooperation at the heart of HIP

As a research institute operated by five universities, HIP enables its researchers to engage in close research cooperation and use research infrastructures at member universities and research institutes. HIP invests actively in interuniversity projects, of which good examples include the theory programme's projects which were launched in 2020. National cooperation increases research synergy between universities. As a rule, HIP's research activities are based on networks, thanks to which new employees can immediately use existing national and international networks.

2.4 STRATEGIC CHOICE 4: A LEADER IN RESPONSIBILITY AND SUSTAINABILITY

Objective 20. Responsibility and sustainability integrated into the operating culture (See also Objectives 7, 8, 14 and 18.)

Responsibility and sustainability in research and other activities

HIP conducts research on themes of responsibility and sustainability, including materials research on energy production technologies and CERN's CLOUD experiment related to atmospheric sciences which investigates atmospheric processes and mechanisms contributing to climate change.

Open access to research results is part of the responsibility and sustainability of scientific work. Research results and data are openly available for everyone to use and exploit, which maximises the impact of research. The principles and practices of open science have been key to HIP's research activities since the institute's establishment. Ways of processing and preserving open data are continuously developed. CERN's CMS experiment will make data openly available in an easy-to-use format, which means that the data can be used not only in research but also in Finnish school teaching and other contexts. HIP researchers train Finnish teachers in using the tools of open science.

HIP's operating culture will be developed by taking responsibility and sustainability into account in all activities, for example, when organising events that require mobility. HIP will strive to continue to make its seminars and other events available to remote participants. Opportunities for remote work will be increased.

As part of responsible leadership, the focus will be on the equal and fair treatment of staff, responsible decision-making, interactive supervisory work, workplace wellbeing and staff skills development. HIP's human resources policy will take equality and diversity into account. High-quality internal communication will also be a priority, alongside open interaction between the leadership and staff as well as more generally within the work community.

The focus of social sustainability will be on inclusivity, participation and the integration of individuals into the research community.

Objective 22. Increased financial leeway

A sound financial structure and appropriate indicators

The objective is to have sustainable finances, based on long-term national funding and the commitment of the member universities. Another objective is a significant increase in the level of funding from the Ministry of Education and Culture for national duties.

HIP will aim to obtain more external funding by supporting applications for funding from the Academy of Finland, Business Finland, the EU and other funding agencies. The quality of the applications will be improved through mentoring and the use of the expertise available at Research Services.

HIP's activities will be developed comprehensively in accordance with the strategic plans of the member universities. The indicators for HIP's activities will be monitored and further developed. The results of HIP's activities will be described in the annual report on operations.

3 RESOURCES

3.1 Human resources plan

The general objective of HIP's human resources plan is to create the conditions required for successful and internationally visible research, based on the development of equal staff recruitment and research career advancement. HIP has a workplace wellbeing group together with the University of Helsinki's Department of Physics. The development of workplace wellbeing focuses on career development, the balance of work and leisure, internal communication and working conditions. HIP is committed to the activities of the workplace wellbeing group and the promotion of workplace wellbeing. The objectives and measures of the workplace wellbeing group for physics at Kumpula Campus for 2021–2024 are described in section 2.3 (Objective 18).

The career development of junior researchers will be advanced through support, advice and project responsibilities. The Helsinki Institute of Physics is a significant platform for the acquisition of scientific qualifications, and HIP's researchers have often progressed to university professorships.

HIP's research activities are organised into fixed-term research projects which are continuously monitored. The Scientific Advisory Board assesses HIP's activities each year.

For research projects, HIP recruits high-quality research staff based on project needs and resources, usually using an open international application procedure. HIP supports international mobility.

The integration of international researchers is supported through HR policy measures. Research staff working in projects have fixed-term employment contracts concluded, where possible, for the whole duration of the project. If possible, research support staff who are included in the category of 'other staff' are employed on a permanent basis. In September 2020, HIP had a permanent staff of nine.

In long-term HR planning, HIP cooperates with the responsible units of the member universities.

3.2 Facilities plan

The Helsinki Institute of Physics operates in established facilities in the Physicum building at the University of Helsinki Kumpula Campus and at CERN. The Kumpula facilities include the Detector Laboratory operated jointly by HIP and the Department of Physics. HIP's researchers also work at other member universities. HIP makes proactive plans for the efficient use of facilities.

3.3 Budget

The budget for 2021 is included in a separate Excel file. The budget is decided at Board meeting 3/2020 (24.11.2020).

4 MONITORING AND REPORTING

4.1 Roles and responsibilities in monitoring and reporting

The director of HIP is responsible for the realisation of the action plan as well as related reporting. The director discusses the achievement of objectives with community members.

The director reports on the realisation of the HIP long-term strategy and HIP action plan to the Board and the international Scientific Advisory Board, which monitor and assess HIP's activities.

HIP draws up an annual report on its operations, describing the previous year's operations both with qualitative and quantitative indicators.