RESEARCH DIRECTIONS AT IFJ PAN

We conduct basic and applied research in the field of physics. Taking advantage of the newest advancements in technology and computer science, we examine the structure of matter and the properties of fundamental interactions, from cosmic scales down to elementary particles.

At the Institute we carry out research in four main fields:

- Particle and astroparticle physics
- Nuclear physics and strong interactions
- Condensed matter physics
- Interdisciplinary and applied research



The Henryk Niewodniczański

INSTITUTE OF NUCLEAR PHYSICS POLISH ACADEMY OF SCIENCES

















FOR SCIENCE AND SOCIETY











DIVISION OF SCIENTIFIC EQUIPMENT AND INFRASTRUCTURE CONSTRUCTION

The Division of Scientific Equipment and Infrastructure Construction is comprised of physicists, engineers and highly qualified technical staff who participate in a number of international and national projects, including: CERN, ITER, ESS, CTA, Pierre Auger Observatory. The Division carries out projects following the principles of best practices and in accordance with ISO9001 standards.

RESEARCH AND MEASUREMENT **LABORATORIES**

The IFI PAN laboratories offer services in the range of individual and environmental dose monitoring, specialist testing of X-ray equipment, calibration of dosimetric instruments as well as extensive studies of natural and induced radioactivity in soil, water, air and the human body. All services offered are accredited in accordance with the Polish Centre for Accreditation conformity assessment standards.

CYCLOTRON CENTRE **BRONOWICE**

IFI PAN Cyclotron Centre Bronowice is a modern research center equipped with the Proteus C-235 cyclotron which can accelerate protons up to the energy of 230 MeV.

As the only research center in Poland, we use proton beams in our treatment of patients with tumors.

Owing to the characteristic way that protons interact with tissues and thanks to specialized apparatus that forms a beam, we can precisely determine the depth to which the beam penetrates the tissue and the volume of the tissue irradiated. This increases the range of healthy tissues spared and minimalizes

the risk of further medical complications.

WE SHARE OUR KNOWLEDGE

We organize a series of international and national scientific conferences and we are actively involved in events popularizing science, such as Arts and Science Festivals, Małopolska Researchers' Night, science picnics

- We publish the results of our research in peer-reviewed scientific journals (ca. 600 papers a year) and in more than 100 other
- Our staff consists of around 600 employees, including about 40 full professors, more than 60 associate professors and over 140 doctors
- We invite you to take part in our student internship programs and to prepare your master's or doctoral thesis under our supervision

WE BET ON THE YOUTH

We conduct doctoral studies at an international level and we support and facilitate further dynamic development of scientific careers of young researchers with a Ph.D. degree