



# Welcome to the Wigner Research Centre for Physics

Information booklet  
for new colleagues



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# How to get there

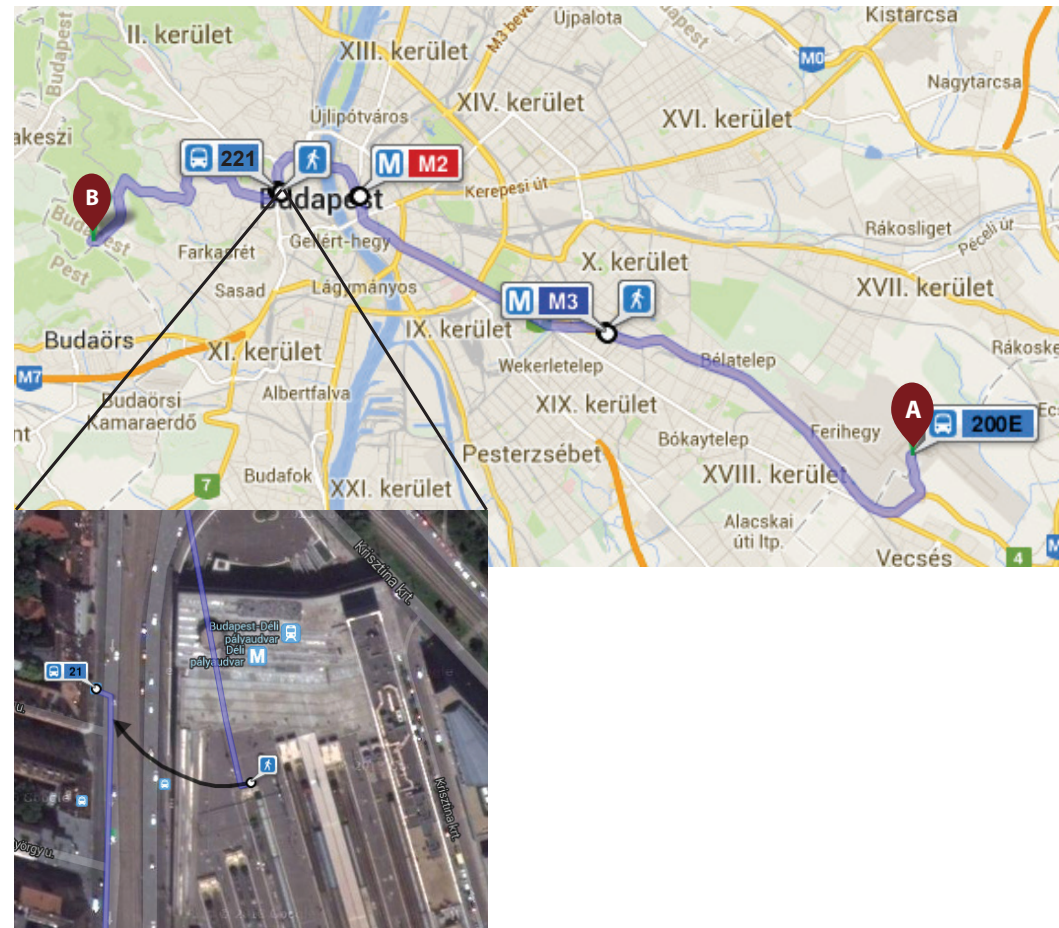


## From Budapest Airport

- 1.) With bus 200E go to Kőbánya-Kispest Metro Station.
- 2.) Take subway line M3 to Deák tér.
- 3.) Change to subway line M2 and go to Déli pu, terminus.
- 4.) Take bus 221 until its terminus, Csillebérc- KFKI.

OR:

- 1.) With bus 100E (with an extra ticket, named: airport shuttle bus single ticket) go to Deák Ferenc tér.
- 2.) Change to subway line M2 and go to Déli pu, terminus.
- 3.) Take bus 221 until its terminus, Csillebérc- KFKI.



# How to get there?

## From Széll Kálmán Square or Déli pu.

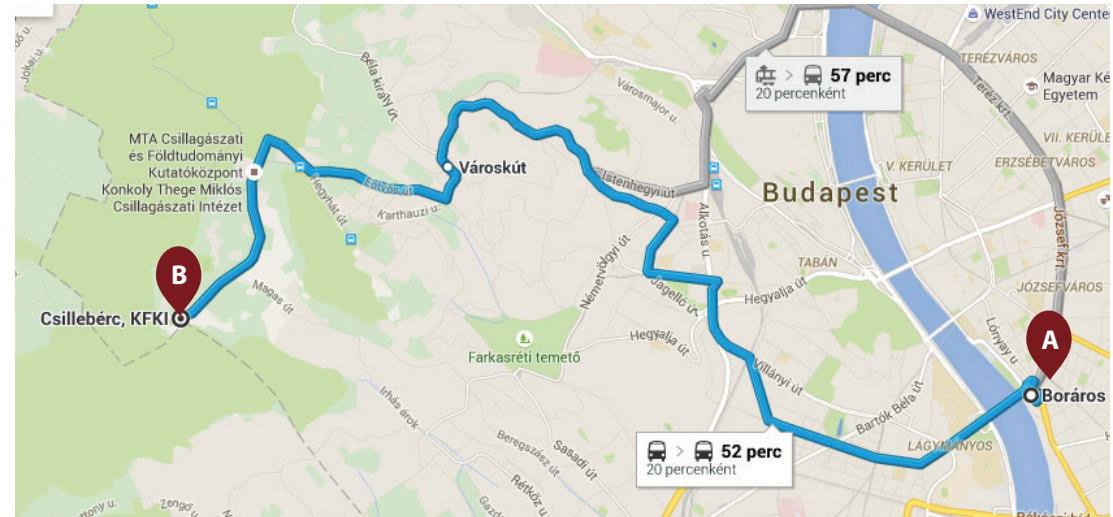
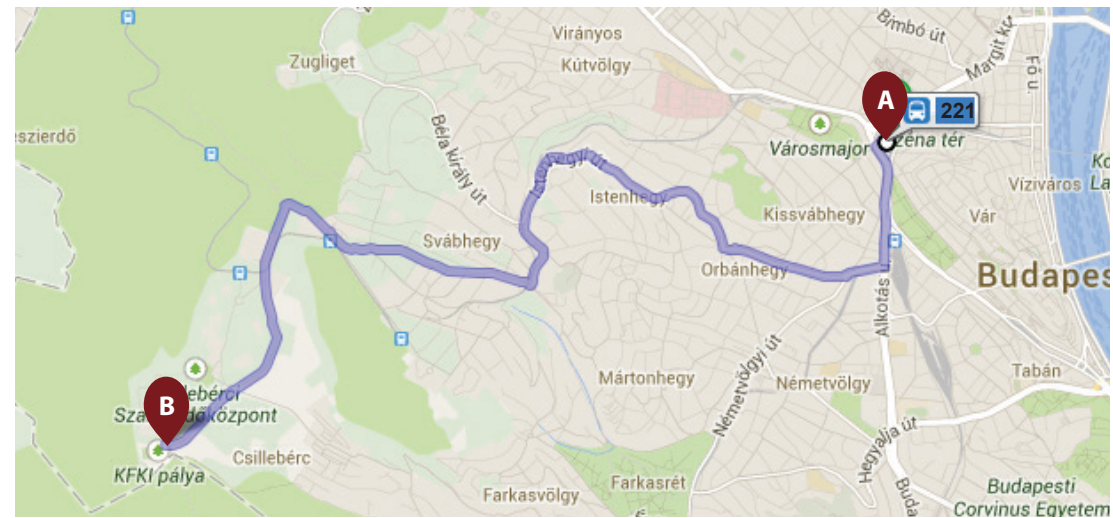
Take Bus 221 until Csillebérc- KFKI, terminus.

## From Boráros Sq. or from Budaörsi Ave.

with Bus 212 until Normafa, terminus. Change for Bus 221 until Csillebérc-KFKI, terminus.

**In the morning, and at the end of the work time some 212 bus are available between the KFKI campus and Móricz Zsigmond square.**

**In the morning between 5:30 - 8:00 colleagues with entry cards can enter through the upper gate (Bus stop “KFKI étterem”), but one cannot leave there.**



## Temporary and fixed entry cards:

Temporary and permanent entry card: Your group leader or department head will provide entry card, local phone number, e-mail address, keys, internet access through the Administration of the Wigner RCP.

If an entry card is lost or stolen, you must inform the security guards as soon as possible to invalidate the card. If you want to stay on campus after 21 hours, please inform the security guards by phone, and give your name, your department and the number of the building where you work.



## Entry information:

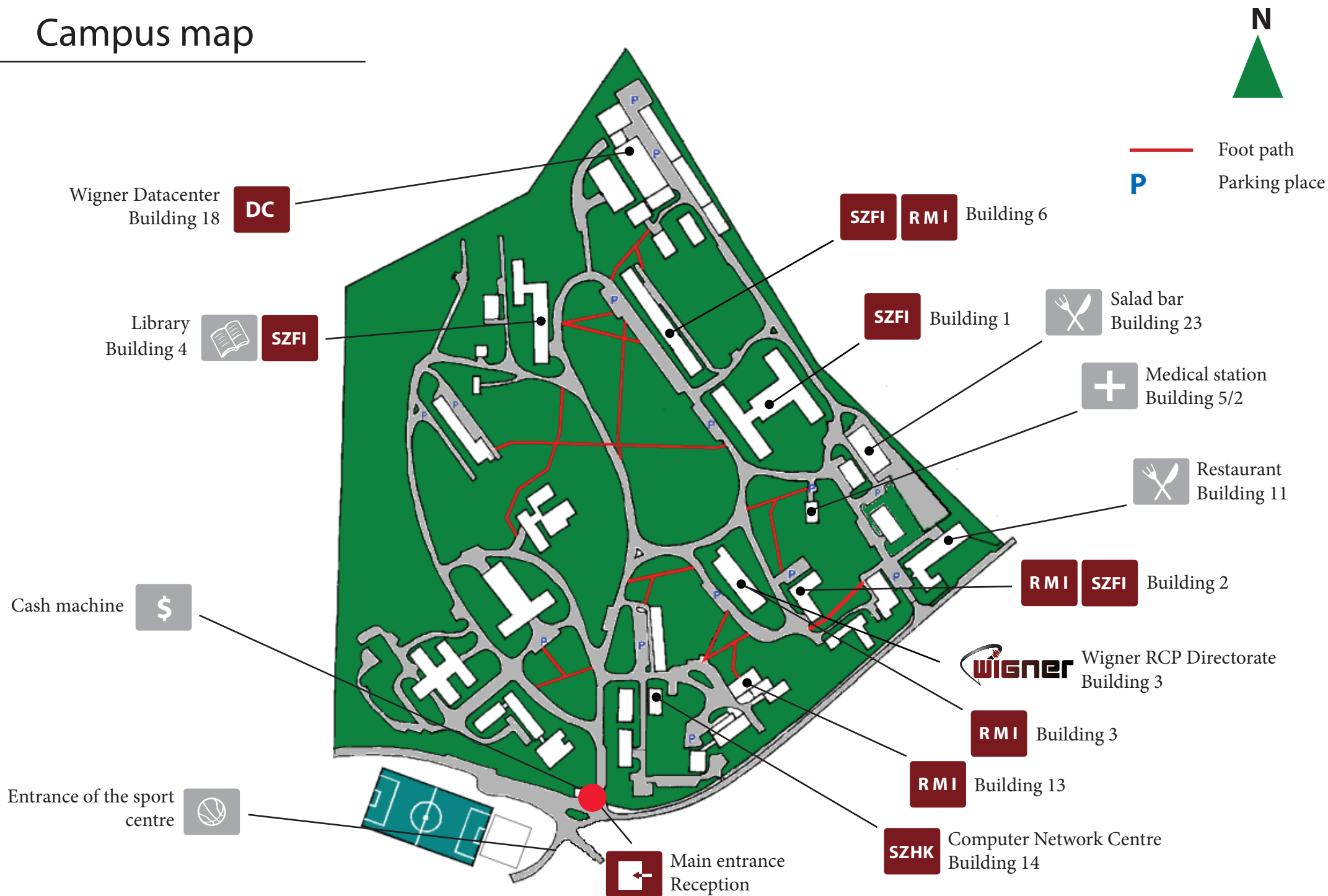
Entry is possible via the Reception where visitors receive an entry card. For that an ID card, driving license, passport, or student card with a photo is needed. Children under the age of 12 CANNOT visit the KFKI Campus. (Between 12 and 14 only with special permission.)

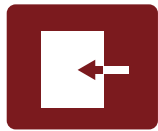
Visitors with a car may ask for an entry card validated for their cars at the reception. With the car only the driver can enter the campus, the passengers have to get off and pass the reception. The same rule is valid for leaving the site.



Main entrance, reception

# Campus map





### Central contacts:

Central phone number: +36 1 392 2222  
Address: Konkoly-Thege M. str., 29-33.  
Website: <https://wigner.hu/>  
Operator Ltd.: <https://kfk.hu/>  
(with the campus phonebook)



### Wigner RCP Secretary:

Office: Building 3, Floor 1, Room 111  
Secretary: Ildikó FAZEKAS  
Email: [titkarsag@wigner.hu](mailto:titkarsag@wigner.hu)  
Phone: Ext. 1126, 2512  
(from outside: +36 1 392 2512)

RMI Secretary: Éva OSVÁTH Phone: Ext.:1787  
SZFI Secretary: Éva FÜZI Phone: 2768

### Wigner RCP Finance Department:

Department: Building 3, Floor 2  
Contacts: <https://wigner.hu/en/financial-unit>



### Security Guard:

Reception: Ext.: 1187  
In case of emergency (0-24):  
Ext.: 1155 and 1745



### Medical station, first aid:

Ext.: 1445

**National emergency number: 112**

# Administration

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The Administration System is available from the Intranet (on the **wigner.hu** website) or directly: <https://ugyint.wigner.hu/login.php>

More important functions are available in the intranet web page (<https://wigner.hu/>) of the Administration System: daily work register, material procurement, holiday requests, traveling administration, access registration, and report submission.

## **Accesses:**

The Group/Department Leaders can ask new accesses like entry card, permission for entry with car, e-mail address, internet access.

## **Daily work time registration:**

You have to register the daily work activity on this site, the Group Leader certify at the end of every month.

## **Material Procurement:**

Every order have to register in this system. The procurement can start only if the Group/Department Leader permits it, and the orderer receives an e-mail about it. The payment of the bills can also start if the procurement is registered in this system.

## **Holidays:**

You can ask the permission of holidays in this system. The Group/Department Leader permits it and the system send an e-mail about it.

# Document Server

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Most important regulations, documents, forms are on this site. The Document Server is available on the Intranet System (on **wigner.hu**)



## **Secretary of the Director General:**

The Secretariate is in Building 3, 1st floor, Room 111. They help in administrative problems, you find here the keys to the meeting rooms, and you can submit documents to be signed here. The secretary can schedule meetings to the DG. Secretary: Ildikó FAZEKAS, ext. 2512. E-mail: titkarsag@wigner.hu

Secretary of the Institute of Particle and Nuclear Physics: Éva OSVÁTH Building 3, Room 111, ext. 1787.

Secretary of Insitute of Solid State Physics and Optics: Éva FÜZI Building 1, Room 6, ext. 2768

## **Communication Advisor:**

Csilla DOVICSIN-PÉNTEK - Building 3, room 111, phone: +36 30/487 9869 e-mail: pentek.csilla@wigner.hu, kommunikacio@wigner.hu

The Communication Advisor is responsible for the mainpart of the internal and external communication of the Wigner RCP. She can help in the communication with the media, the Eötvös Loránd Research Network and the Hungarian Academy of Sciences. They coordinates the publication of the news on the wigner.hu website and help in the publication on the elkh.org or the mta.hu website. Communication Advisor can help in design some brochures and posters, organization of events and visits, in the questions about the brand of the Wigner RCP and PR materials.

## **Scientific Advisor:**

Szilvia POTHOCZKI – Building 1, room 201, phone:+36 1 392 2222, 1469 extension e-mail: pothoczki.szilvia@wigner.hu

The Scientific Advisor help of the DG and other directors to keep contact with Eötvös Loránd Research Network, the Hungarian Academy of Sciences, other science institutes in Hungary and in other countries and with universities. She helps the researchers with the administration in scientific work and keep the connected registers up to date. She can help in some tenders, like job applications and institutional grants.

# Medical Station

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## Medical Station

The medical station is located in Building 5/2. Pre-employment examinations and other obligatory and screening check-ups are made here.

### Physicians:

Dr. Katinka ANDRÁSSY, Dr. Petra KOVÁCS (they speak English)

### Occupational Health Assistant:

Gabriella CSEPREGY

### Consultation hours:

Tuesday, Wednesday: 8:00-12:00 doctors are available

On Monday 08:00 - 14:00, Tuesday 08:00 - 17:00, Wednesday 08:00 - 13:00,

Thursday 08:00 - 13:00, Friday 08:00 - 13:00 the occupational health assistant is available.

Phone: +36 1 392-2580

Mobile phone: +36 70 881-1764

Local ext. 1445



## Occupational health and safety, radiation safety

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Occupational health and safety (OHS), radiation safety OHS education is obligatory for every employee. Courses are coordinated by Szabina SZTAKÓ (KFKI operator)

Pre-registration for the course:

Phone: ext. 2608, mobile: +36 70 941 1047

The radiation safety officer of Wigner RCP is Dénes KAPTÁS, Building 1, Office 52 / 09B Phone: 2636, 3045, e-mail: kaptas.denes@wigner.hu

**Contact:** The KFKI Library is in Building 4, Floor 1. Phone ext. 1404, E-mail: [lib@wigner.hu](mailto:lib@wigner.hu).

**Website:** [www.kfki.hu/konyvtar/](http://www.kfki.hu/konyvtar/)

## Opening hours:

Monday - Thursday: 9 - 15.45

Friday: 9 - 14.30

The Library was founded in 1953. The core of the current library formed the basis of the stocks of smaller department libraries which were merged to establish a unified, professional library in 1960. We are the common research library for the Wigner Research Centre for Physics and the Centre for Energy Research. It also serves as the home library for the physical science in Hungary. It offers physics and materials science collections and also selections in chemistry, computer science and mathematics. The access to the Library is limited to campus employees, but guest users are also welcome.

## Computer Network Center

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The main tasks of the CNC are the operation and development of the local network of the KFKI Campus, operation and development to the connection of the network of the Hungarian research and higher education (NIIFHBONE), development of other systems and giving network and informational services.

The colleagues of the CNC can help in problems with e-mail addresses, internet connection, servers of the KFKI campu and websites etc.

**Contact:** Building 14, ext. 1342, +36 1 392 2504

**Website:** [wigner.hu/en/infrastructure](http://wigner.hu/en/infrastructure)



# Restaurants

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## **Salad Bar**

This campus restaurant is located in Building 23.

Open: 7.00-13.00 (closed 8.15 – 10.45)

More information: [www.kfki.hu/content/etlap/salatabar](http://www.kfki.hu/content/etlap/salatabar)

## **FH Gasztro:**

This restaurant is located in Building 11.

Open: 11.00-13.30

More information: [www.kfki.hu/content/etlap/fhgasztro](http://www.kfki.hu/content/etlap/fhgasztro)

## **Vending machines :**

Coffee machines are in building 1, 4 and 26 and at the reception.

Chocolate machines are in building 1, 4 and at the reception.



# Bank, Post Station

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## **ATM:**

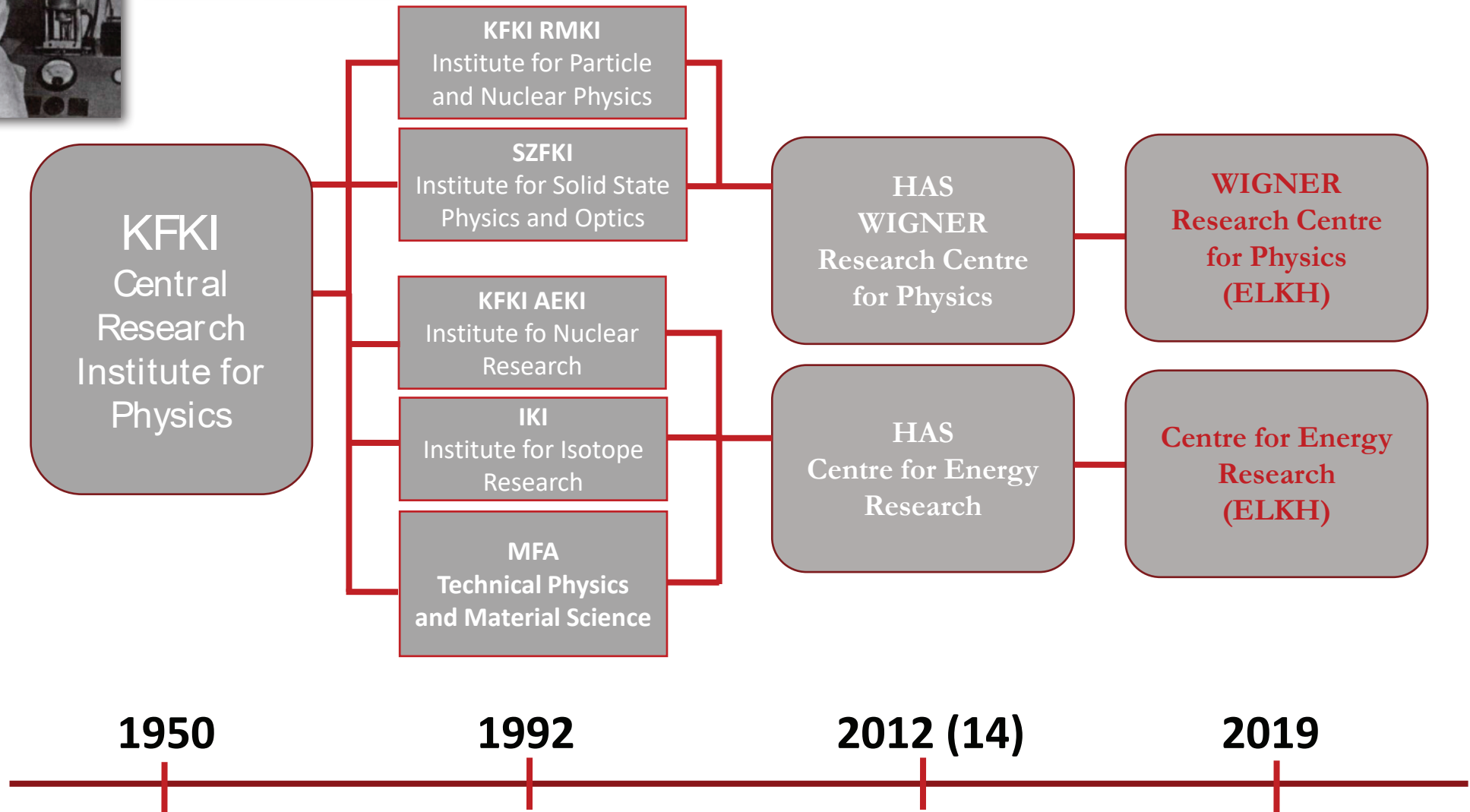
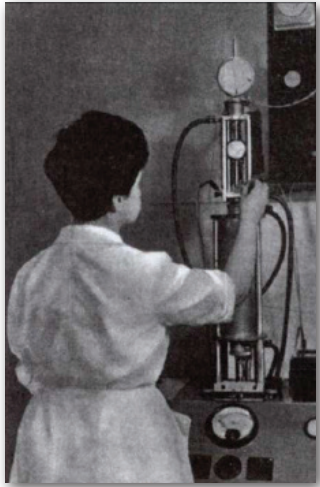
There is an OTP ATM outside the main entrance of the KFKI campus.

## **Post Station:**

Official letters should be sent through secretariats.

The nearest Post Station is in the Mammut shopping center.

# History of the Wigner RCP



# Our eponym: E.P. Wigner



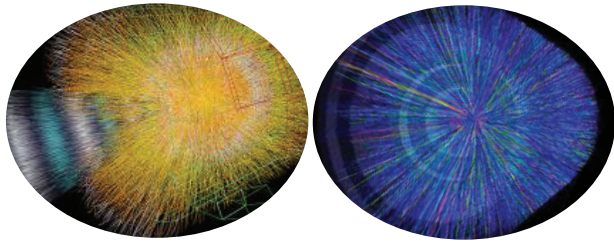
**Eugene Paul Wigner** (1902-1995) Nobel-laureate physicist

He graduated in the Fasar Lutheran High School, where two determinative teachers started him in his career, László Rátz, teacher of mathematics, and Sándor Mikola, teacher of physics. At the request of his father he enrolled at the Budapest University of Technology, Faculty of Chemical Engineering, but after half a year he continued his chemical engineering studies at the Berlin Technische Hochschule. Although he studied chemistry, he was interested in physics all along. By combining the chemist and the physicist in himself, Wigner played a pioneering role in the creation of plutonium production. He calculated and designed the world's first atomic reactor, and he also designed the first water-cooled nuclear reactors. He was the first who proposed the using of water, too, to ensure the safety of slowing down the neutrons. Now he is considered the world's first nuclear reactor engineer.

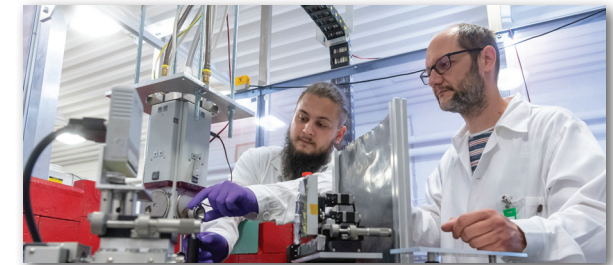
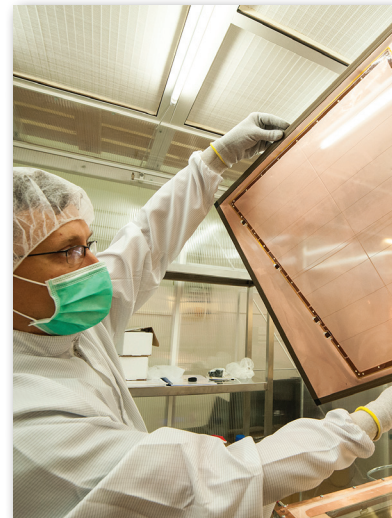
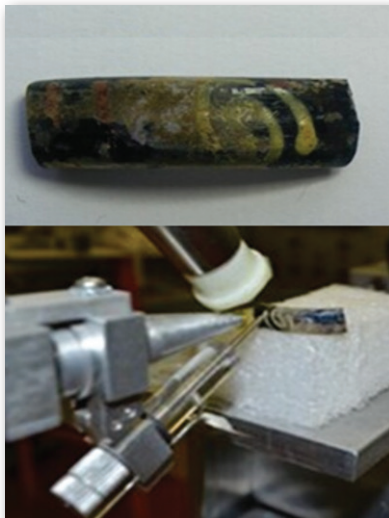
In 1963 he received a shared Nobel Prize in Physics „for contributing to the theory of atomic nuclei and elementary particles, particularly through the discovery and application of the fundamental symmetry principles”. The HAS founded a prize in 1999, which is awarded each year for researchers, who created something lasting in the field of nuclear energy and Hungarian physics.

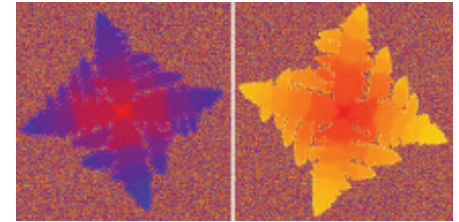


*“If science is expected to grow so great, both in the comprehensiveness of its subject and also in depth, that the human mind will not be able to embrace it, that the life span of man will not be long enough to penetrate to its fringes in time to enlarge it, could several people not form a team and accomplish jointly what no single person can accomplish? Instead of returning with Shaw to Methuselah, can we find a new way to enlarge the capacity of human intellect by the juxtaposition of several individual intellects rather than by extending a single one?”*

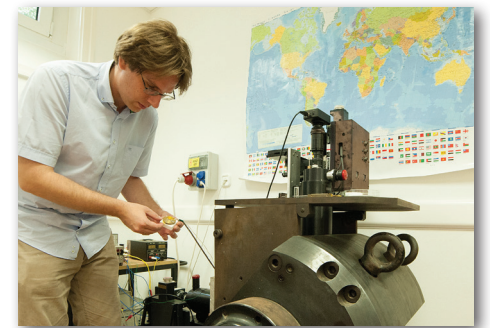
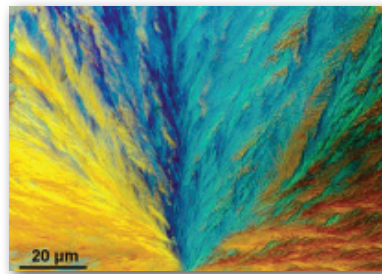
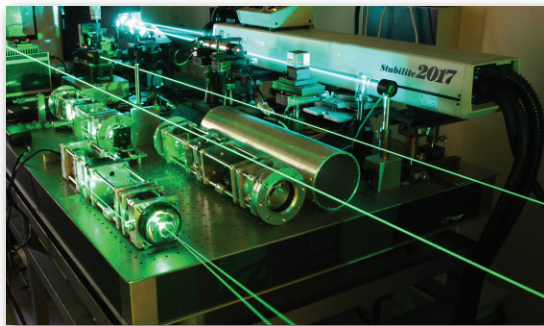


The Institute for Particle- and Nuclear Physics make research in particle and nuclear physics, gravitation research, space physics, nuclear solid-state physics and material science, neurosciences and complex systems. The development activities of the institute are in laser physics, nuclear analytics, space physics, high-speed data processing, some spectroscopies, electrical, mechanical and information technology devices serving special needs, neurorehabilitation systems and different type of softvers. Their researchers work in more international projects, in some of these, they coordinate the Hungarian participation. The operation and development of more big equipment are also part of the roles of the institute, like EG-2R accelerator and the NIK heavy-ion implanter, the MBE molecule beam epitaxia, the GRID system and other high capacity computers.





The Institute for Solid State Physics and Optics make research in quantum optics, laser applications and atomic level material research. The main profile of the institute is the table-top experiments in local laboratories, theoretical research, and simulations based on modern numeric method with big calculation capacity demand. Main topics: quantum informatics, nonlinear optical spectroscopy, medical applications of lasers, production and examination of new materials, development of spectroscopic methods of material research from infrared range to X-ray radiation and free-electron lasers. The researchers of the two institutes participate in the graduate and postgraduate education near the scientific work, take more seminars, lead many diploma and doctoral thesis every year.







## The structure of the Institute for Particle and Nuclear Physics

### Theoretical Physics

Particle Physics and Field Theory Research Group	Building 3
Heavy-Ion Physics Research Group	Building 3
Gravitational Physics Research Group	Building 3
Femtoscopia Research Group	Building 3
Holographic Quantum Field Theory Research Group	Building 3

### High Energy Physics

Hadron Physics Research Group	Building 2
Innovative Research Group for Particle Detector Development	Building 2
Standard Model and Search for New Physics Research Group	Building 2
Laser Particle Accelerator Technologies Research Group	Building 3

### Material Science by Nuclear Methods

X-Ray Spectroscopy Research Group	Building 3, Building 13
Functional Nanostructures Research Group	Building 3 Building 13
Ion Beam Physics Research Group	Building 13

### Computational Sciences

System Level Neuroscience Research Group	Building 6
Theoretical Neuroscience and Complex Systems Research Group	Building 6
Rehabilitation-technology Research Group	Building 6
Data and Compute Intensive Sciences Research Group	Building 6
Quantumcalcualtion and informatics Research Group	Building 6

### Space Physics and Space Technology

Space Physics Research Group	Building 2
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### Nanoplasmonic Laser Fusion Laboratory

Building 3



# The structure of the Institute for Solid State Physics and Optics

## Theoretical Solid State Physics Research

Strongly Correlated Systems Research Group	Building 1
Complex Systems Research Group	Building 1
Long-range Orders in Condensed Systems Research Group	Building 1
Semiconductor Nanostructures Research Group	Building 1

## Experimental Solid State Research

Non-equilibrium Alloys Research Group	Building 1
Structure Research Laboratory	Building 1

## Complex Fluid Research

Partially Ordered Systems Research Group	Building 1
Gas Discharge Physics Research Group	Building 1
Liquid Structure Research Group	Building 1

## Applied and Nonlinear Optics Research

Laser Applications and Optical Measurement Techniques Research Group	Building 1, Building 4, Building 25/A
Femtosecond Lasers Research Group	Building 25/A
Ultrafast, High-intensity Light-matter Interactions Research Group	Building 1
Crystal Physics Research Group	Building 1, Building 4
Nanostructures and Applied Spectroscopy Research Group	Building 1

## Quantum Optics and Quantum Information Research

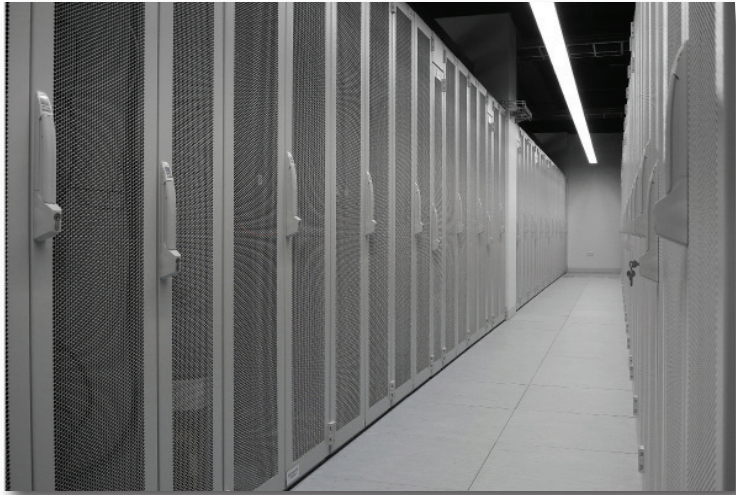
Quantum Optics Research Group	Building 1
Quantum Information and Foundations of Quantum Mechanics Research Group	Building 1

## Quantum Information National Laboratory

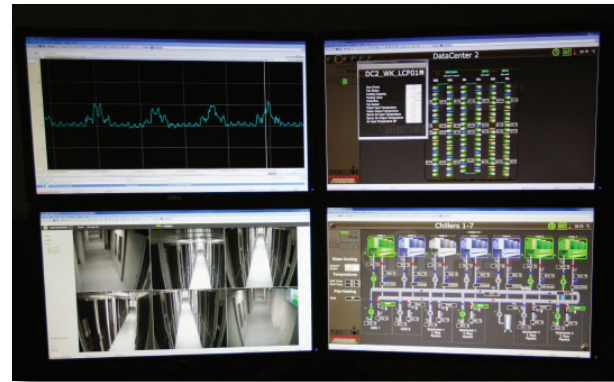
Building 1

# Wigner RCP Datacenter

Web: <http://wigner.hu/wignerdc/>  
18. building



Wigner Datacenter is a large scale investment project of the Wigner Research Centre for Physics. The Datacenter was built in 2012 with the support of the Ministry of National Development; a project fitting in the EU Digital Agenda and the Digital Renewal Action Plan. Our Datacenter aims to conform to the dynamically changing needs of research and innovation by providing a cutting-edge infrastructure with exceptional energy efficiency, in an environmentally friendly way.



For the next decade the pillars of the European research-related IT infrastructure will be the high security data centres that follow a sustainable operating model. The Datacenter supports the dynamically changing needs of research and innovation through a cutting-edge infrastructure with exceptional energy efficiency, in an environmentally friendly way. The innovative implementation of the concentrated, high energy density computing and data storage capacity will serve as a reference for research IT projects in the future.



# The location

Buda Hills is a very important green area of Budapest. It has a diverse geology, its main mass is based upon mesozoic dolomite and limestone, and on that we find sedimentary rocks. Our campus is located also on a layer of limestone and marl.



This diverse geology supports a colourful flora and fauna. In some areas we can find 20-30 protected animals and kinds of plants within a hundred meters. The forests in the Buda Hills are dominated by deciduous, mostly oak trees, but we can see beech trees as well.

Our research centre is in the green forest of Csillebérc. This area called about a fairy (Csile) from the legends of the Buda Hills. While walking in this beautiful landscape we can easily imagine those fairy tales.

Although we cannot meet with the imaginary creatures, we can see many interesting animals and plants.



The squirrels and birds can be frequently seen from the windows of the offices and labs, but there are many other interesting and protected insects and reptiles on the campus that live in hiding.

## **KFKI sports and camping ground:**

A sporting complex is located next to the KFKI campus. Amongst the many options offered there, you can play table tennis, football and tennis there.

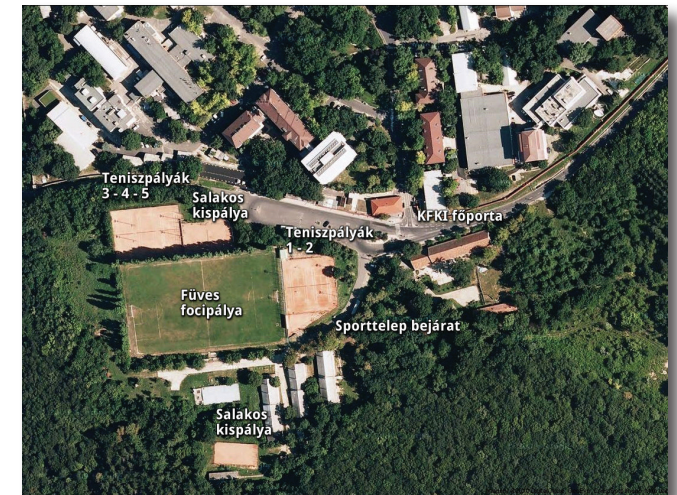
Contact:

E-mail: [uzemeltetes@kfkkipark.hu](mailto:uzemeltetes@kfkkipark.hu)

Phone: ext. 3020

Next to the play ground, you can also enjoy horse riding in the Normafa Riding School:

<https://www.facebook.com/NormafaLovasiskola> (in Hungarian)



## **Gym and sauna:**

A gymnasium is available on site in Building 4. Having entered the building, follow the corridor to your right until you reach the gym area. You will also find a sauna in front of the gym. For further information and prices please contact KFKI Technology Park Ltd. at the [uzemelteto@kfkkipark.hu](mailto:uzemelteto@kfkkipark.hu) e-mail address.

## **Resort Hotels of the Hungarian Academy of Sciences (HAS):**

The HAS maintains resort hotels in two areas of Hungary: the region of Mátra and Cserhát Hills and at the Lake Balaton. These hotels are available for employees of the Hungarian Academy of Sciences and of its former institutes. They offer reduced prices for the employees and their relatives.

More info (in Hungarian): [udulo.mta.hu](http://udulo.mta.hu)

**Sports in District 12 of Budapest (in Hungarian):** <https://www.hegyvidek.hu/kikapcsolodas/sport-szabadido>

# Events

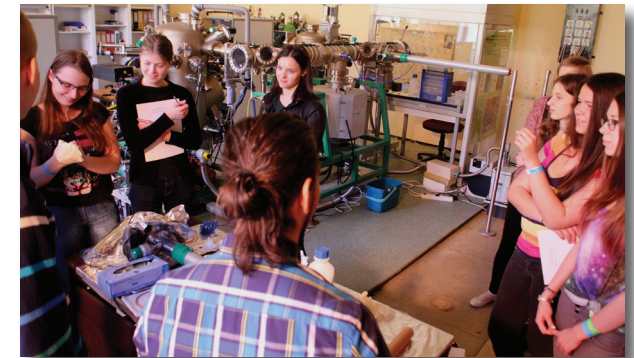
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At Wigner RCP various annual events are organized. Most are professionals, about those one can find information at the web site <https://wigner.hu/>, at the websites of the research groups, and also in advertisements posted on site.

There are also outreach activities for families and students. Such events are the Researcher's Night in September, the Girls Day in April for students and families, the Wigner Octoberfest and the Christmas celebration for the employees of Wigner RCP. For more information see <https://wigner.hu/> and the circular mails of the Wigner Management Board.

We encourage every colleague to join the outreach activities as an instructor or demonstrator.

You get more information from Communication Advisor.



# Family

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## **Children on site:**

Due to the strict safety rules, children under the age of 12 are NOT allowed to visit the campus. (Between 12 and 14 only with special permission.)

## **Kindergarten and Nursery of the Hungarian Academy of Sciences:**

The Kindergarten and the Nursery of the HAS is located in the nicest part of Buda, on Rózsadomb. It is a green area with really clean air and a big garden. The Kindergarten is available for the children of employees of the former Research Institutes of the HAS.

More info:

<https://aob.hu/>

1022 Budapest, Barsi street 3.

Phone / fax: 1 326 7780

## **Eötvös Loránd Research Network**

[elkh.org](http://elkh.org)

## **Hungarian Academy of Sciences**

[mta.hu/english](http://mta.hu/english)

## **Operator Ltd. (KFKI operator)**

[kfk.hu](http://kfk.hu)

## **Centre for Energy Research**

[www.energia.mta.hu](http://www.energia.mta.hu)

## **Budapest Research Reactor**

[www.bnc.hu](http://www.bnc.hu)

## **City Hall of District 12**

[www.hegyvidek.eu](http://www.hegyvidek.eu)

## **Children's railway**

[www.gyermekvasut.hu](http://www.gyermekvasut.hu)

## **Duna-Ipoly National Park (information about our natural environment and hiking trails)**

[www.dinpi.hu](http://www.dinpi.hu)

### Sources of the information booklet:

wigner.hu

Természet Világa - 2011 first special issue

Fizikai Szemle - 2006.01.24.

hegyvidek.eu

old.kfki.hu

dinpi.hu

GoogleMaps

### Sources of the pictures:

Archive photos of the Wigner RC

old.kfki.hu - Photos by Béla Selmecsi

National Technical Information Centre and Library



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