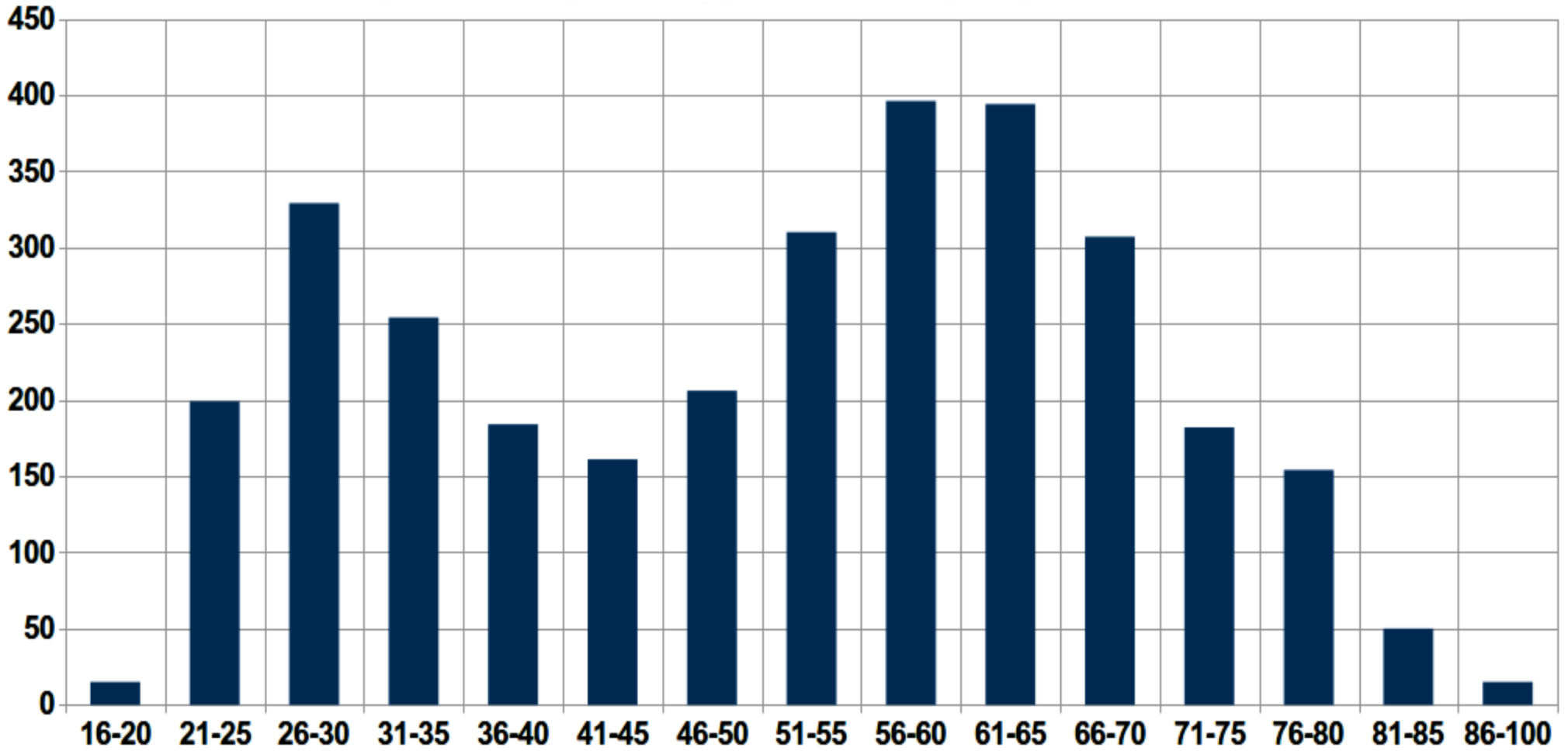


# **Support of young scientists at JINR**

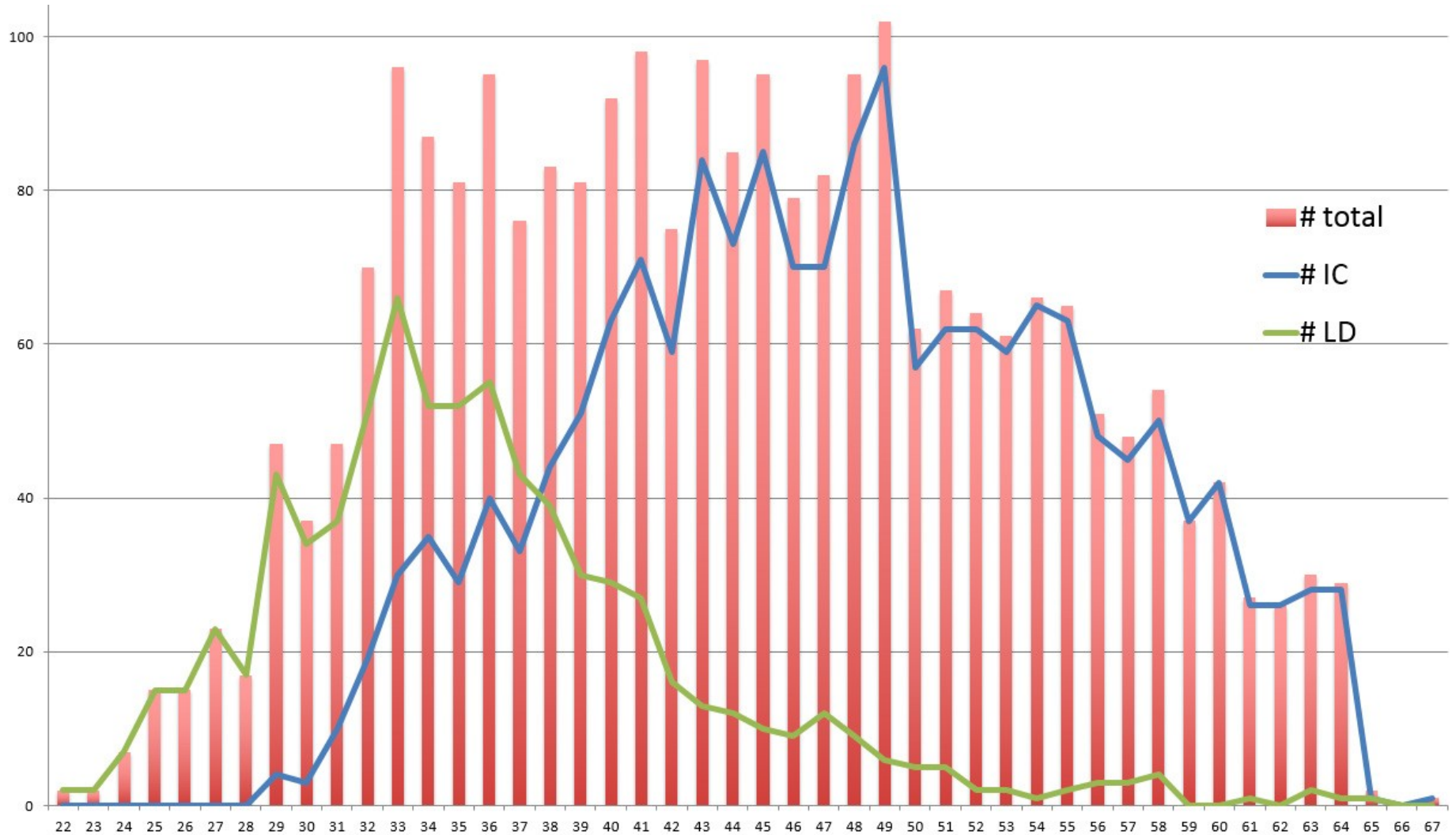
Vratislav Chudoba

FLNR JINR

# JINR staff

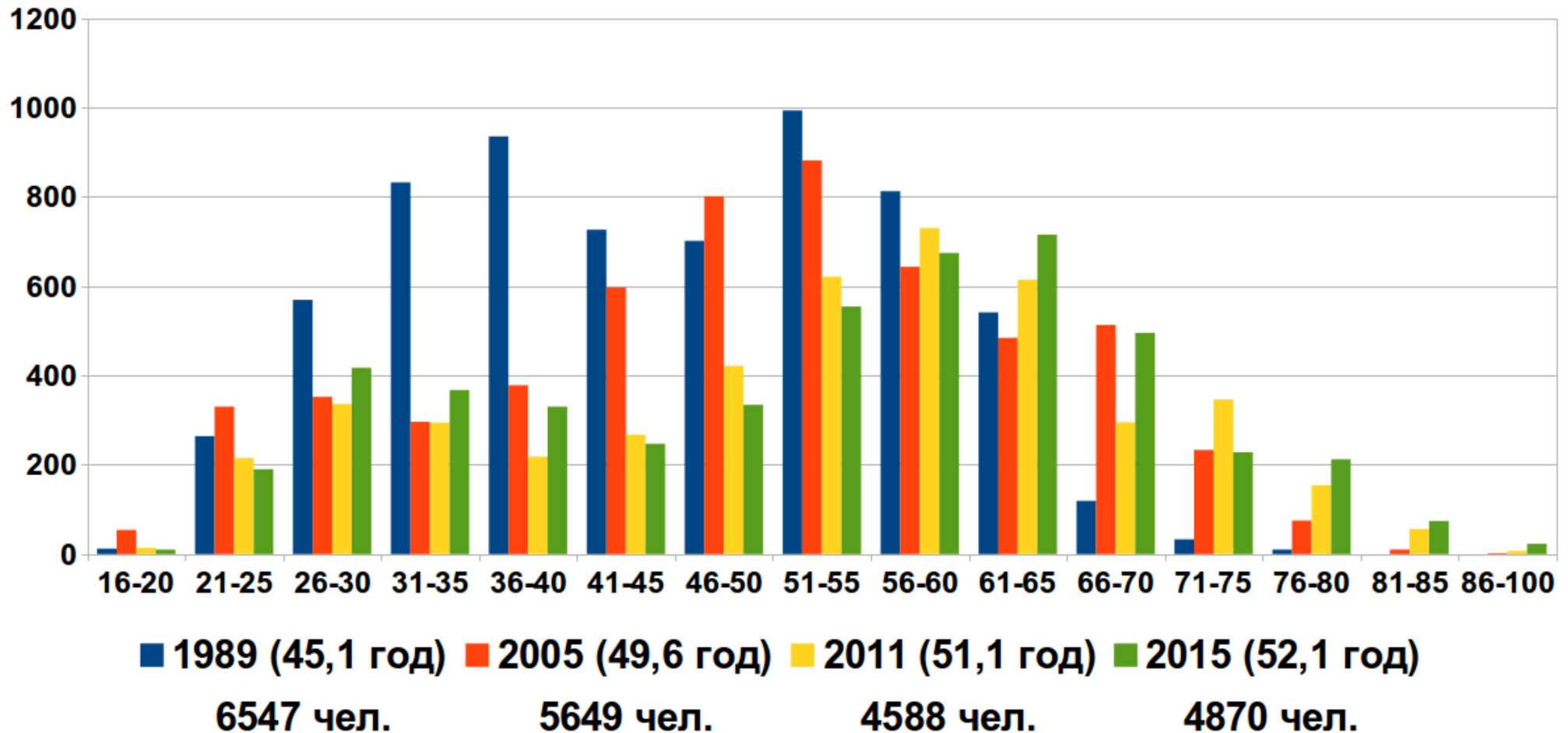


# CERN staff



CERN Bulletin, Issue No. 49-50/2014 - Monday 1 December 2014

# JINR staff - history



# JINR staff

	2010	2011	2012	2013	2014	2015
budget	2823	2923	2973	3060	3111	3179
total	4512	4572	4598	4667	4698	4801

**all staff should be renewed in  
course of 40 years**

- essential flow ~100 person/year
- all ages

# Possible staff policy

- **minimal flow**
  - number of essential new staff per year
- **optimal flow**
  - essential new staff per year increased by factor of 3
    - 1/3 doesn't have sufficient quality
    - 1/3 will wish to leave JINR
    - 1/3 of sufficient quality will stay

# Measures

- **attraction of youth's interest**
  - visits and stays
  - training program
  - youth Conferences and schools
- **keeping of current young staff**
  - adequate financial income
  - appreciation of exceptional results
  - system of bonuses
  - fast competitive selection

# UC activities

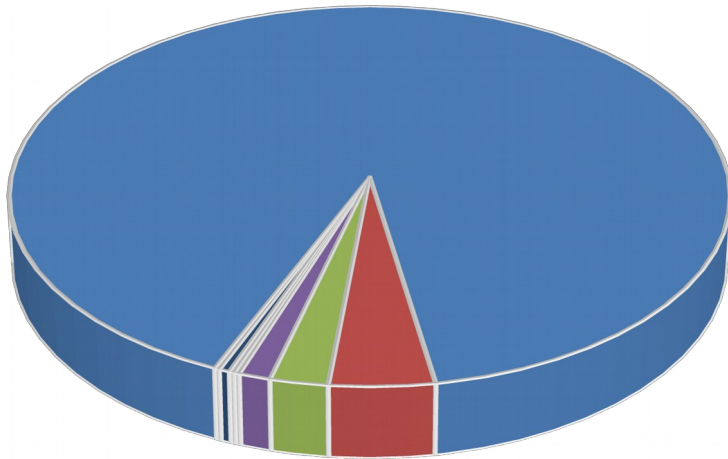
- **students at UC JINR**
- **JINR PhD programs**
- **Engineering Training Center (ETC)**
- **International practices**
- **Summer student program since 2014**



# Student statistics

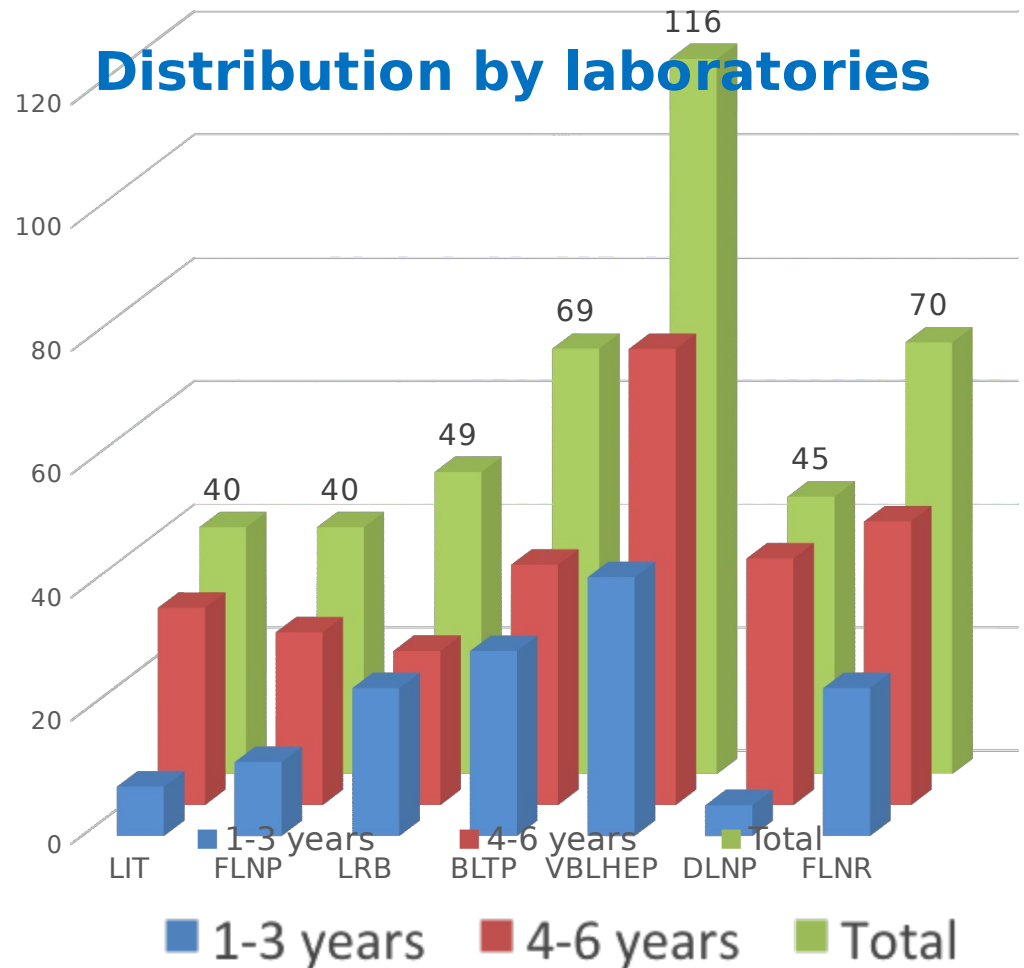
**At 2015-2016 academic year 465 students have been trained at JINR.**

**Distribution by countries**



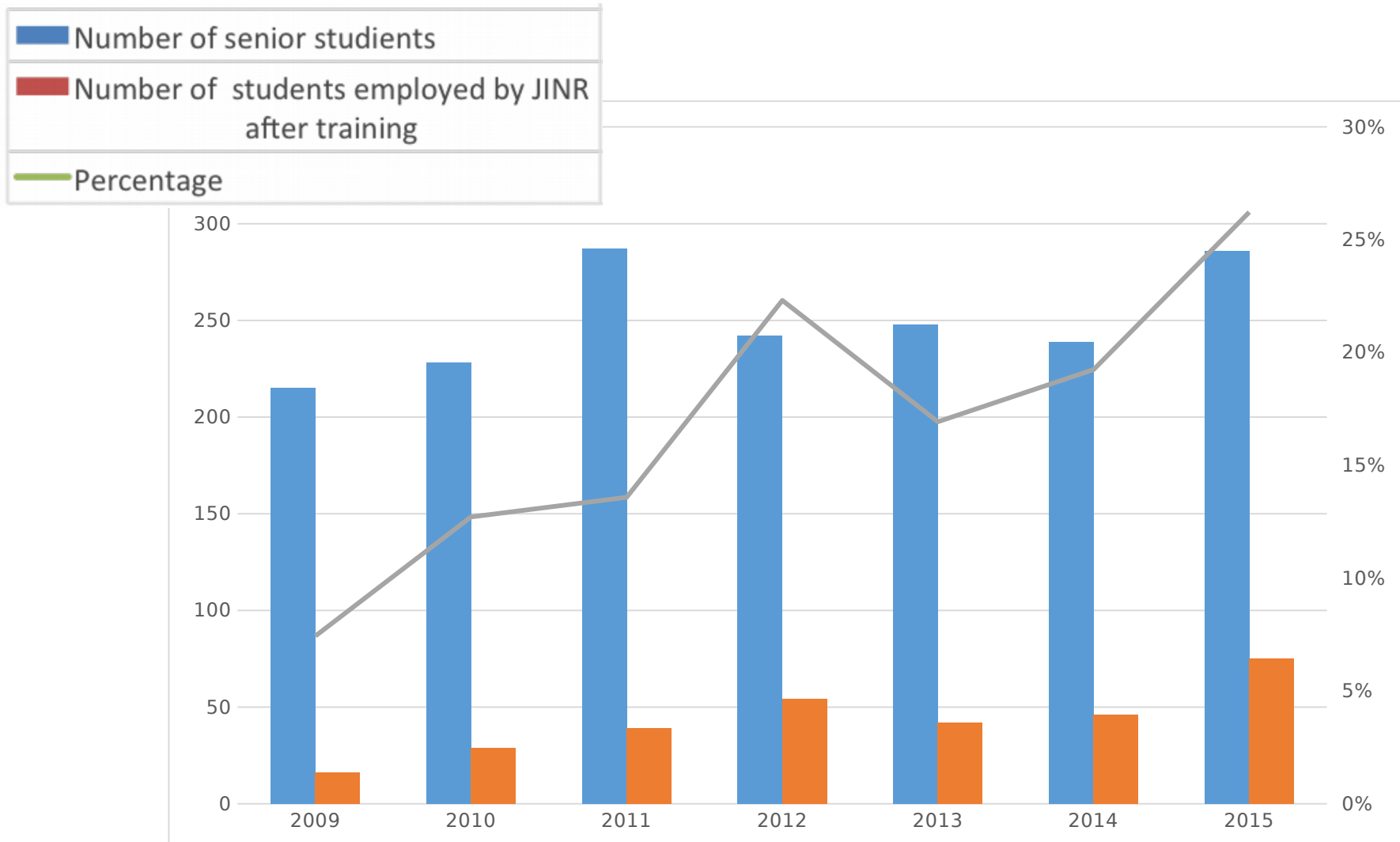
- 423 - from Russia, ■ 20 - from Kazakhstan,
- 11 - from Belarus, ■ 6 - from Ukraine,
- 1 - from Armenia, ■ 1 - from Georgia,
- 1 - from Cuba, ■ 1 - from Mongolia.

**Distribution by laboratories**



# Student statistics

## rate of the students employed at JINR after graduation

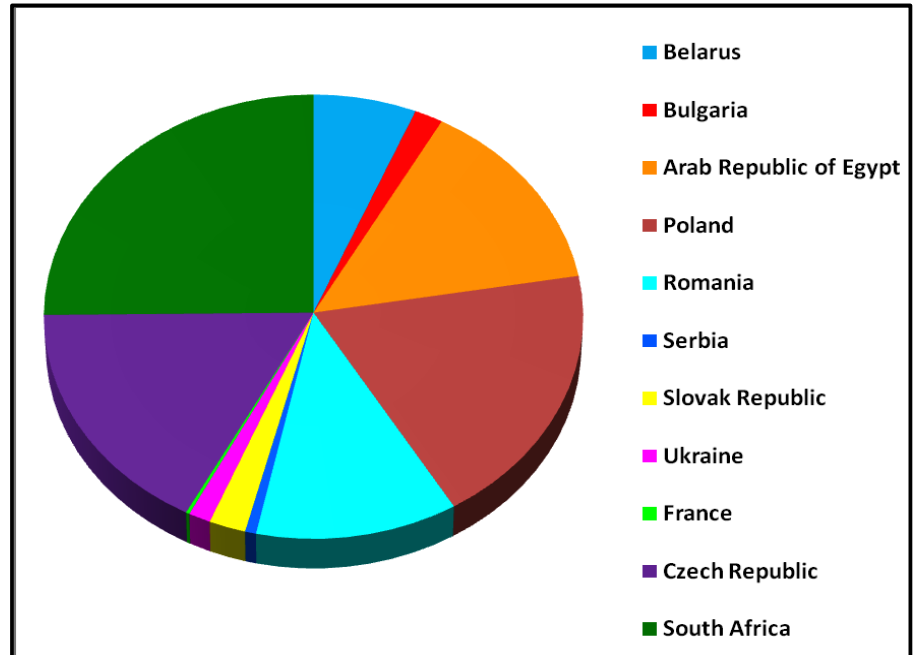


# PhD programs

- **Program for Czech PhD students in JINR**
- **PhD program for JINR staff in Czech Republic**

# International summer student practice at JINR

- **3 times per year**
- **three weeks**
- **lectures in UC JINR**
- **excursion to JINR laboratories**



- **participants chose the topic of their own interest**
- **120 participants annually**

# Summer student program

- **2014: 30 applications, 8 participants**
- **2015: 128 applications, 32 participants**
- **stay around 8 weeks**
- **participants chosen by supervisors**

## SUMMER PROGRAM - 2015

- Information >
- Program schedule >
- Contacts >
- Sponsors >
- How to get >
- News >
- ∨ Add news article
- Participants** >
- Apply >
- Applications >

## Participants lists

Photo	Name / Nationality / University	Supervisor
Летняя студенческая программа в ОИЯИ - 2015		
	<b>Кирилл Виленинович Локтаев</b> Russia Обнинский институт атомной энергетики ИАТЭ НИЯУ МИФИ <a href="#">Заявка</a> <a href="#">Скачать файл отчёта</a>	Максим Викторович Булавин
	<b>Ibrahim Mohamed Hany Ahmed</b> Egypt Nuclear & Radiation Engineering Department, Faculty of Engineering, Alexandria University <a href="#">Заявка</a> <a href="#">Смотреть состояние отчёта в профиле</a>	Georgiy Alexandrovich Chelkov
	<b>Тигран Рафаелович Мурадян</b> Armenia Международный научно-образовательный центр НАН РА <a href="#">Заявка</a> <a href="#">Скачать файл отчёта</a>	Анатолий Олегович Сидорин
	<b>Анастасия Олеговна Мерзлая</b> Russia Федеральное государственное бюджетное образовательное учреждение высшего профессионального образования «Санкт-Петербургский государственный университет» <a href="#">Заявка</a> <a href="#">Скачать файл отчёта</a>	Vyacheslav Mikhailovich Golovatyuk

# Engineering training center (ETC)

- **practical skills required for modern physical research**
- **additional to theoretical knowledge, not always acquired during studies**
- **established in 2014, operational this year**

# ETC: 1<sup>st</sup> stage

- **series of advanced laboratory classes**

- basics of nuclear physics
- radiation protection and safety
- particle detectors
- vacuum technology
- RF technology
- magnets
- cosmic rays
- electronic and automation



- **first set of classes already implemented**

# ETC: 2<sup>nd</sup> stage

- **“educational” Linac-200 e<sup>-</sup> accelerator**
- **classes**
  - accelerator and beamline operation
  - beam diagnostics
  - magnetic optics
  - detectors of radiation
- **bright future**
  - synchrotron radiation
  - material physics
  - radiobiology
  - „toy“ experiments



requests and proposals  
are very welcome



# ETC: key organization ideas

- **training courses in topical blocks (1-3 weeks)**
- **emphasis on individual creative work**
- **e-learning techniques providing theoretical background in advance**

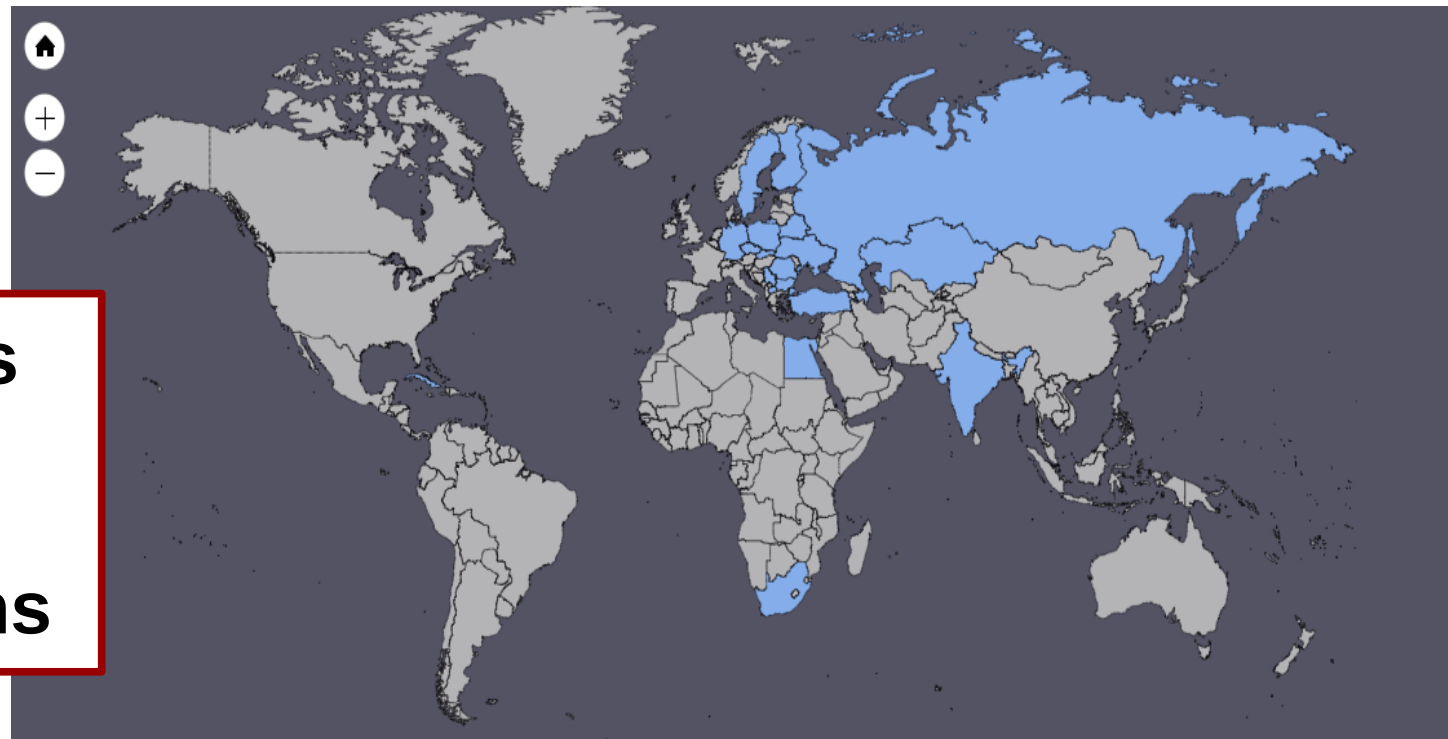
working language: english  
all materials in English and  
Russian

# Youth grants and prizes

- **100 grants per year**
- **receive bonus for most efficient young staff**
- **JINR youth prizes: analogue of JINR prizes**

# Conference AYSS

- **~250 participants**
- **working language: English**
- **Conference proceedings with ISBN**
- **best conference talks submitted in PEPAN Letters**



**20 countries**  
**more than**  
**70 institutions**

# Funding of activities

Activities/k\$	2017	2018	2019	2020	2021	2022	2023	Sum
the young staff grants system and awards	332	343	354	365	375	398	422	2589
young conferences, schools, seminars and public lectures, scientific excursions and presentations	50	52	54	56	59	63	67	401
the financial and social support system: sport, health care, preferential rents	50	50	50	50	50	50	50	350
increasing and improving the quality of special housing fund	480	496	513	530	562	596	632	3809
loans and subsidies for the accommodations	480	496	513	530	562	596	632	3809
the beneficial purchase of special housing fund with payment by installments	480	496	513	530	562	596	632	3809

**Thanks for attention**