

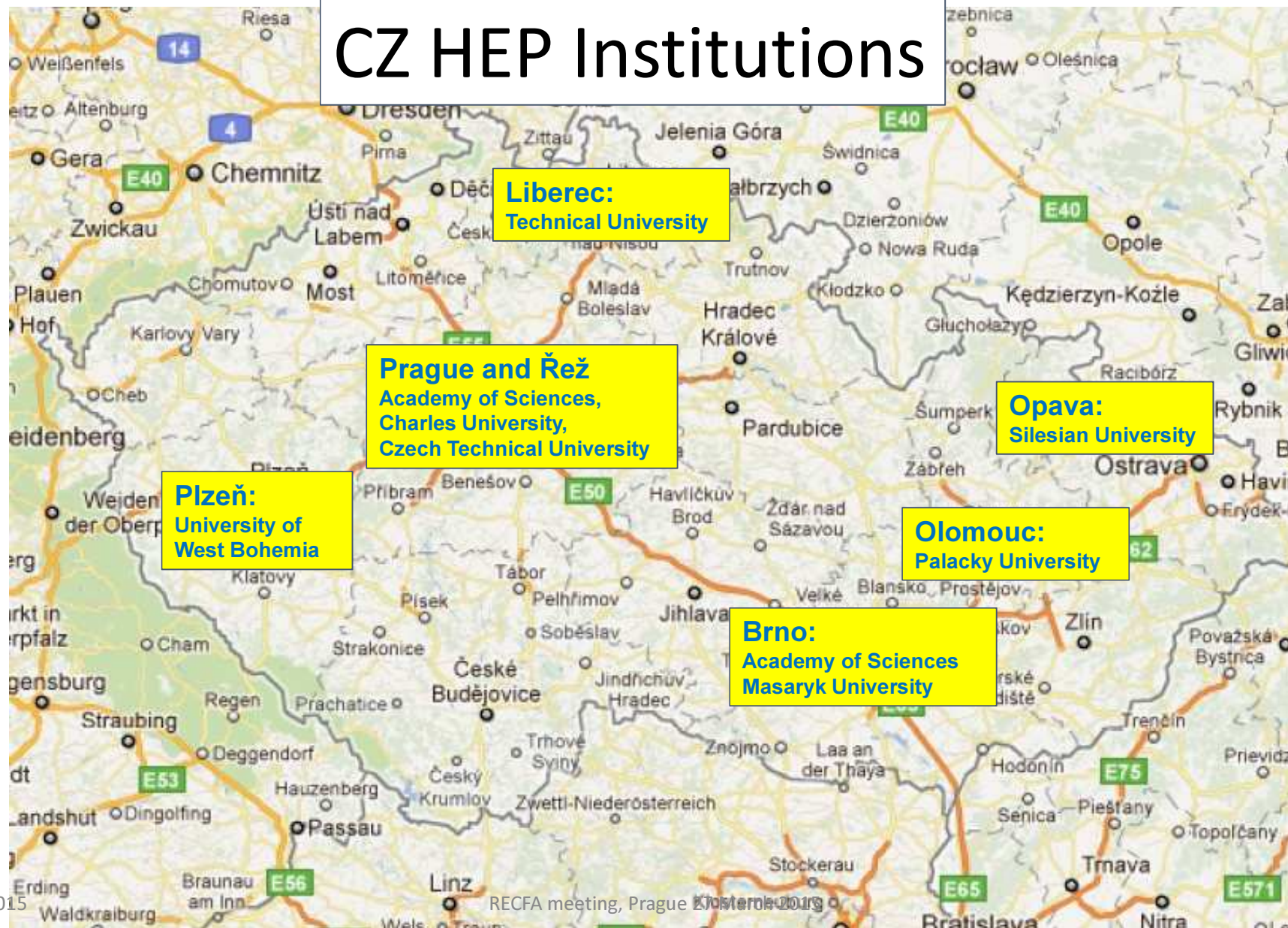
# CZ HEP Organization Overview

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Charles University, Prague

The Committee for Collaboration of the Czech Republic with CERN

# CZ HEP Institutions



# Prague and Řež HEP Institutions

ŘEŽ



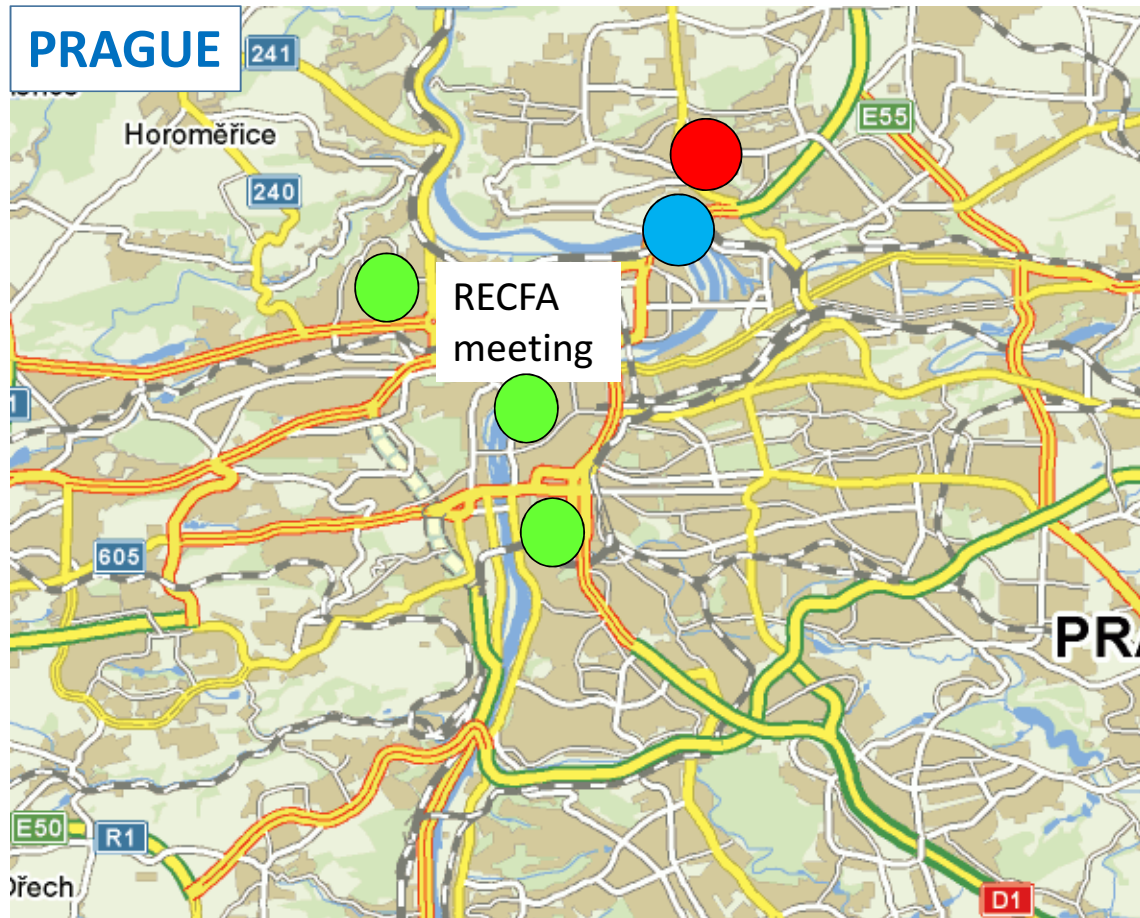
**Nuclear Physics Institute of the  
Academy of Sciences of the  
Czech Republic, Řež u Prahy**

**Institute of Physics of the  
Academy of Sciences of the  
Czech Republic**

**Faculty of Mathematics and Physics  
of the Charles University in  
Prague**

**Czech Technical University in  
Prague:**

- Faculty of Nuclear Sciences and Physical Engineering,
- Institute of Applied and Experimental Physics,
- Faculty of Mechanical Engineering



# Major activities of CZ HEP Community

Experiments and R&D projects at CERN

Experiments at FNAL, BNL, KEK, GSI

Neutrino Physics

Astroparticle Physics

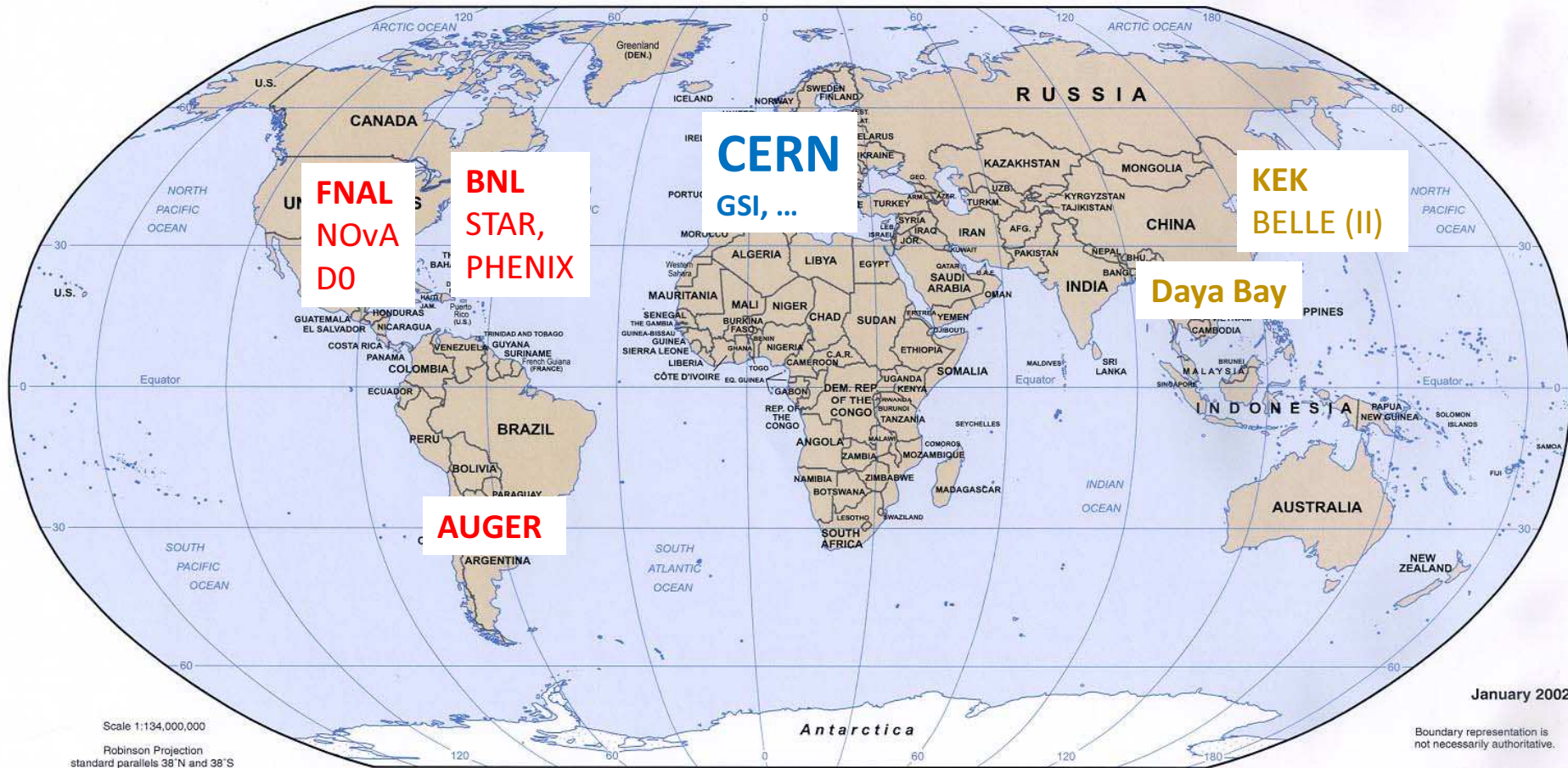
Theory

Outreach

# Major activities of CZ HEP Community

	Proton Accelerators	Heavy Ion Acc	Electron Acc	Astro particle	Neutrino	Theory	Nuclear Physics
Institute of Physics, Academy of Sci	X	X		X	X	X	
Nuclear Physics Institute, Ac. of Sci	X	X			X	X	X
Czech Technical University	X	X		X	X	X	X
Charles University	X	X	X	X	X	X	X
Palacky University, Olomouc	X	X		X			
Technical University, Liberec	X						
Uni. of West Bohemia, Pilsen	X						
Masaryk University, Brno						X	
Silesian University, Opava				X		X	

# Major worldwide experiments with the participation of CZ teams:

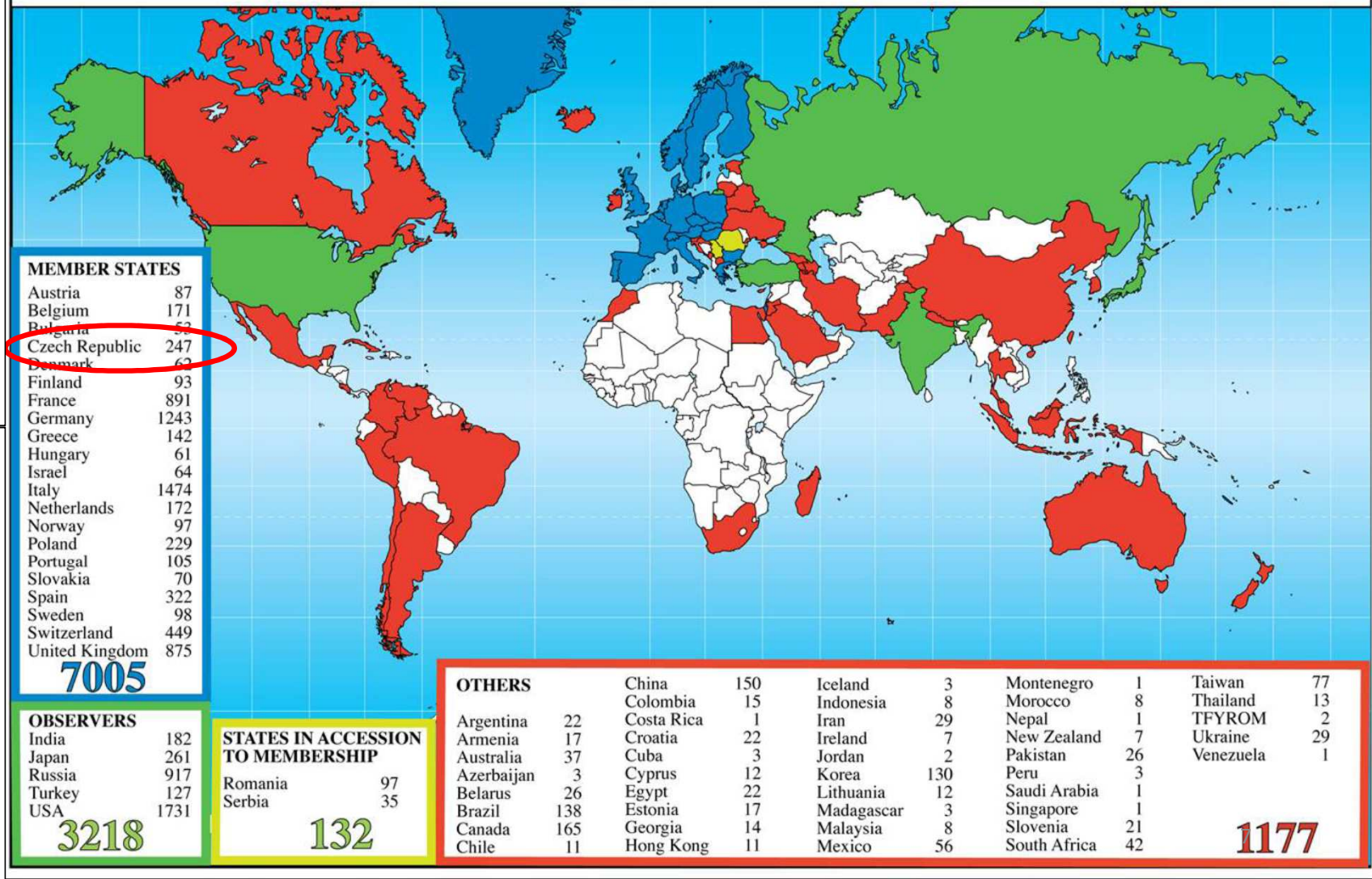


Main strategy of the HEP organization in the Czech Republic is to fully exploit CERN membership and to perform most of the activities at CERN. CERN is considered as CZ HEP Infrastructure

**247** CERN users from the CZ Institutions

**3.5%** out of 7005 users from the CERN  
**Member states**

**Distribution of All CERN Users by Location of Institute on 13 January 2015**



# Research performed at CERN

	ATLAS	ALICE	COMPASS	TOTEM	DIRAC	OSQAR		AEgIS	CMS	MOEDAL	NA62	nTOF	ISOLDE	R&D	Computing	THEORY	OUTREACH	TOTAL	Scientists, postdocs	Students	Other
AS IoP	X	X		X	X									X	X	X	X	49	32	10	7
AS NPI		X											X	X	X	X	X	22	14	6	2
CTU	X	X	X	X	X	X		X		X				X	X	X	X	81	32	35	14
CU	X		X			X			X		X	X		X	X	X	X	61	30	22	9
UP OL	X																X	6	2	4	
TUL			X			X												2	1	1	
UWB				X														4	2	2	
No of Authors	64	22	10	10	10	9		3	3	4	5	4	2	20				<b>233</b> <i>(16 F)</i>	<b>121</b> <i>(6 F)</i>	<b>80</b> <i>(8 F)</i>	<b>32</b> <i>(2 F)</i>



## Experiments at national laboratories in US, JP and Europe

	FNAL		BNL		KEK	GSI
	D0	NOvA	STAR	PHENIX	BELLE (II)	HADES
AS IoP	X	X		X		
AS NPI			X			X
CTU	X	X	X	X		
CU	X	X		X	X	
No of Authors	8	~10	11	11	8	5

# Non Accelerator Neutrino Experiments

## Astroparticle experiments

## JINR Dubna

Traditionally we have very good collaborations with JINR teams within various experiments

The research of CZ scientists directly performed in JINR: Nuclear Physics, Theory, Neutrino experiments

Accel.	Neutrino 0ν ββ mββ	mve	React.	Astro particle		Dark Matter	Dark Energy
NOvA (see prev.p.)	NEMO-3 other 2 beta 0ν	KATRIN	Daya Bay JUNO	AUGER, CTA	CZELTA	PICASSO	LSST
AS IoP				X			X
AS NPI		X					
CTU	X				X	X	
CU	X		X	X			
UP OL				X			
SU OP					X		
No of Authors	~10	~10	4	20		2	

# The Committee for Collaboration of the Czech Republic with CERN

CZ cooperation with CERN is under the responsibility of the

**Ministry of Education, Youth and Sports of the Czech Republic.**

The Ministry is also major funding agency to cover CZ HEP Activities.

**The Committee for Collaboration of the Czech Republic with CERN**

Is the advisory board of the ministry for CERN.

The committee is composed by representatives of ministries of Education, Foreign Affairs, Finances and Industry and Trade, by the CZ delegates to CERN governing and advisory bodies and by representatives of major Institutions collaborating with CERN.

The Committee meets regularly 4 times a year, normally a week before the CERN Council Meeting.

The Committee advises the Ministry the CZ positions to the agenda points of the CERN Council

The chair of the Committee is the Scientific delegate to CERN Council.

In Geneva we have excellent relations with ambassador of the Permanent Mission of CZ and her team.

The Committee coordinates the preparation of major grant proposals to cover CZ activities at CERN

Funding questions will be addressed in the following talk of prof. Jiri Chyla

Last summer we had more meetings in order to prepare new grant proposals and to organize the celebration of the CERN 60 years anniversary.

# Meetings of CZ HEP Community

Since end of 2012 our ECFA delegates took initiative and together with the Committee organize meetings of CZ HEP Community.

The first meeting has been devoted to preparation of CZ contribution of the European Strategy for Particle Physics.

We continue with 1-2 meetings /year following up the Strategy and its national implementation and meetings on the experiments upgrades.

# SUMMARY

The CZ HEP Community is strong, it has well balanced composition of PhDs, students, engineers, computing specialists and technicians.

The teams are very well visible in International teams of experiments.

Having in mind long term future of projects our younger colleagues are taking responsibilities to lead major projects.

The Community contributed to the European Strategy of Particle Physics in Europe.

In coming years we plan to support major points of the European Strategy, in particular:

- We plan to play an important role in the LHC physics programme and upgrades of ATLAS and ALICE detectors for the HL-LHC
- In Accelerator neutrino physics we started the discussions about participation in future projects.
- We plan to keep the effort on detectors R&D both for the HL-LHC upgrades and future projects (ILC, FCC)

All these plans will require reasonable resources. The Community very much hope in continuation of decent and adequate financial support from the Funding Agency and Institutions.