

# ILL-CZ Information day and Czech neutron community meeting

8<sup>30</sup> coffee, cakes, discussions

9<sup>00</sup> P. Javorský: welcome and brief summary of ILL-CZ activities in 2016/17

9<sup>15</sup> J. Kulda: ILL news

9<sup>30</sup> M. Klicpera: Final report from the postdoc stay at ILL - magnetic excitations in tetragonal CeCuAl<sub>3</sub>

9<sup>50</sup> M. Vališka: Plans for PhD stay in ILL

10<sup>05</sup> M. Kempa: Simulation and data analysis of inelastic data from ThALES using the RESTRAX package

10<sup>25</sup> Coffee, refreshment, discussion

10<sup>45</sup> F. Schreiber: Neutrons for the study of soft and biological matter

11<sup>10</sup> P. Mason: Why biochemistry needs neutrons scattering

11<sup>35</sup> A. Viani: Investigation of magnesium phosphate ceramics with neutron scattering techniques

11<sup>45</sup> P. Mikula: Neutron scattering facilities at NPI Řež

12<sup>00</sup> P. Beran: Engineering diffractometer BEER@ESS - phase 2

12<sup>15</sup> N. Kučerka: Probing Matter with Neutrons in Slovakia

12<sup>30</sup> P. Lukáš: Czech partnership in the European Spallation Source project

12<sup>50</sup> Neutron research in CR and Europe – discussion

Discussion and refreshment

# Czech participation in ILL



## ILL-CZ Research Infrastructure

[www.illcz.cz](http://www.illcz.cz) , International Advisory Committee (IAC), Coordination Committee, ....

CZ membership fee:

2016 covered by MŠMT (INGO + RI)

2017-18: 80% by RI, 20% INTER-TRANSFER

2019 - increase of our % (??)

Support any other activities in ILL (students/postdocs, user support, participation on instrument developments,...)

## **Activities in scientific bodies of ILL**

Members of subcommittees:

College 5a - Přemysl Beran

College 4 - Pavel Javorský

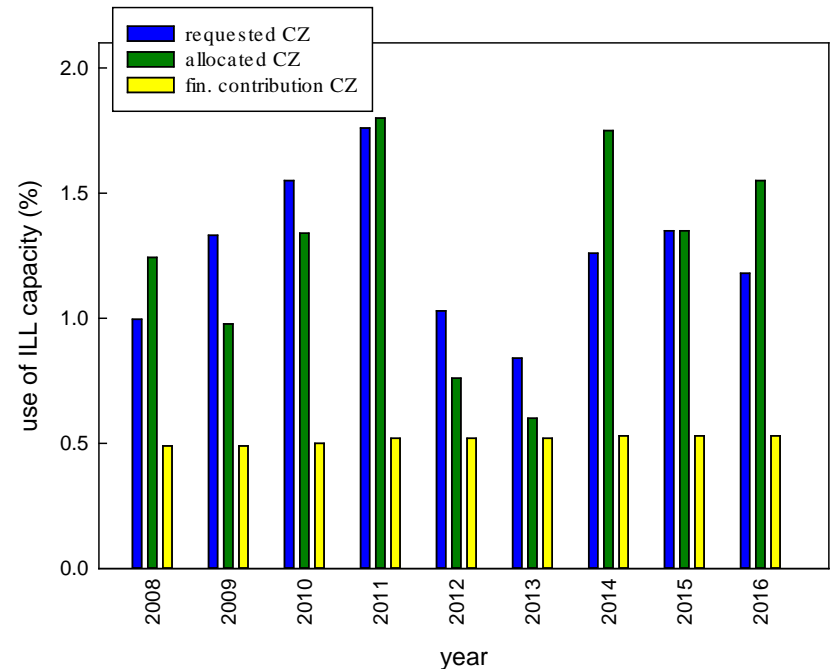
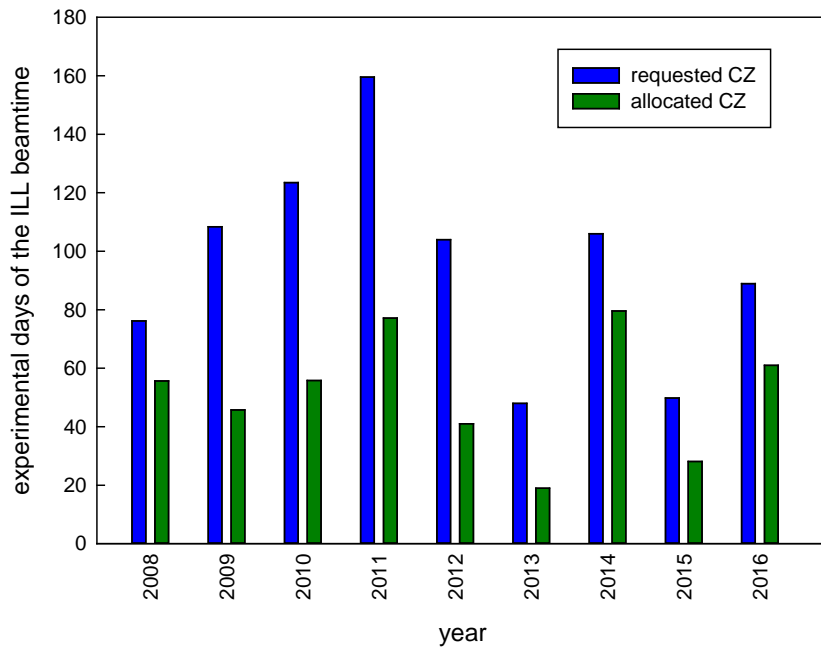
# Proposals in 2016

27 proposals (almost all successful), + 10 proposals which do not enter the statistics

Spring round		autumn round	
CZ requested:	1.82% (80.23 days)	CZ requested:	0.28% (8.71 days)
CZ allocated:	2.05% (57.80 days)	CZ allocated:	0.28% (3.18 days)

CZ requested: 1.18% (88.94 days)  
 CZ allocated: 1.55% (60.98 days)

! financial contribution 0.53% !



+ factor of PhD student/postdoc in ILL + ThALES“



**Spring round 2017**  
(before national balance)

<b>TABLE 3</b>	<b>Request</b>	<b>Request</b>	<b>Allocation</b>	<b>Allocation</b>
	<b>days</b>	<b>%</b>	<b>days</b>	<b>%</b>
<i>Without purely non member countries (null) and ILL/ESRF redistributed</i>				
AT	81.22	2.09	74.15	3.52
BE	14.53	0.37	9.84	0.47
CH	232.20	5.98	130.83	6.20
CZ	52.36	1.35	40.64	1.93
DE	900.84	23.19	427.43	20.27
DK	43.28	1.11	28.52	1.35
ES	177.22	4.56	84.29	4.00
FR	1019.26	26.24	552.14	26.18
GB	815.33	20.99	443.70	21.04
IT	236.89	6.10	137.97	6.54
PL	101.30	2.61	81.87	3.88
SE	198.81	5.12	90.57	4.30
SK	11.58	0.30	6.70	0.32
		0.00		0.00
<b>Total</b>	<b>3884.81</b>	<b>100.00</b>	<b>2108.66</b>	<b>100.00</b>

Broader spectrum of scientific fields and institutions

University of South Bohemia

The Institute of Theoretical and Applied Mechanics AS CR, v. v. I  
(Centre of Excellence Telč)

MU Brno (return after a long pause)

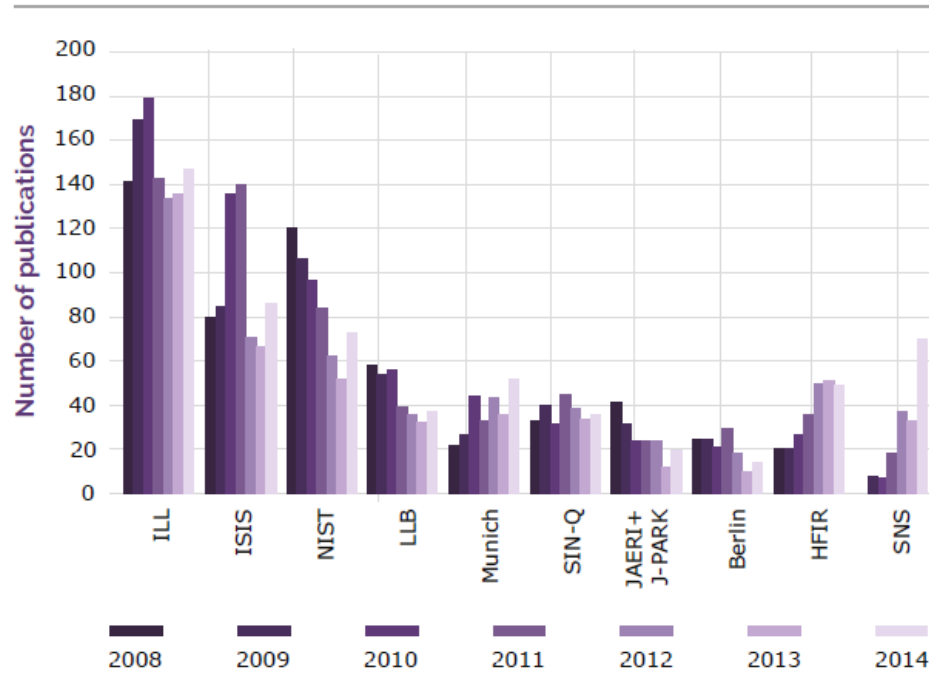
## **Experiments realized in 2016**

30 experiments (10 „test experiments“)

# Outputs 2016

6 papers in IF journals

2012-2016: 33 papers in IF journals, 11 high-impact (ILL statistics)



ILL total ~ 600 papers/year

**Figure 4. High impact publications**

Number of papers published in high impact journals using data from leading neutron sources around the world, up to 2014. Adapted from image courtesy of ILL: Christian Vettier, Helmut Schober & Bill Stirling.

## Comparison with ILL average:

The 33 papers makes 1.1% (33 papers/5years/600total) ILL high impact: 140/year.

The 11 CZ papers in 5 years makes 1.57%

## Students (postdocs) in ILL

- long-term stay (PhD or postdoc) in ILL

2016 - M. Klicpera

2017 – M. Henriques + M. Vališka

- positive influence on the ILL statistics
- access to more instruments, flexible use of beam time
- **scientific progress in the career, new contacts, ...**
- nice place to stay 😊

- students participate in experiments (or even main proposers)

3 diploma thesis containing ILL data defended in 2016:

- Bc. J. Zubáč: Electronic properties of  $\text{RPd}_5\text{Al}_2$  compounds, UK MFF, defended 20.6. 2016
- Bc. Karel Pajskr: Magnetic properties of  $\text{Nd}_2\text{RhIn}_8$  and related Nd-based tetragonal compounds, UK MFF, defended 12.9. 2016
- Bc. K. Vlášková: Magnetic excitations in cerium compounds, UK MFF, defended 12.9. 2016

HERCULES (2017 – 3 students)



