

# Integrating less represented countries into the mainstream of European geosciences

**Melinda Dósa**, Anikó Timár, Anita Heward

- Wigner Research Centre for Physics, Space Physics and Space Technology, Budapest, Hungary
- Europlanet 2024 RI
- University of Kent, UK

Hello, I am Melinda Dósa from Budapest.

I'll show you, that Eastern Europeans are reluctant to participate in conferences, and ... this makes things even more difficult...



# Geographic imbalance in Earth and Planetary sciences within Europe



East vs. West – historical division  
(see Matenco, EGU 2019-12478)

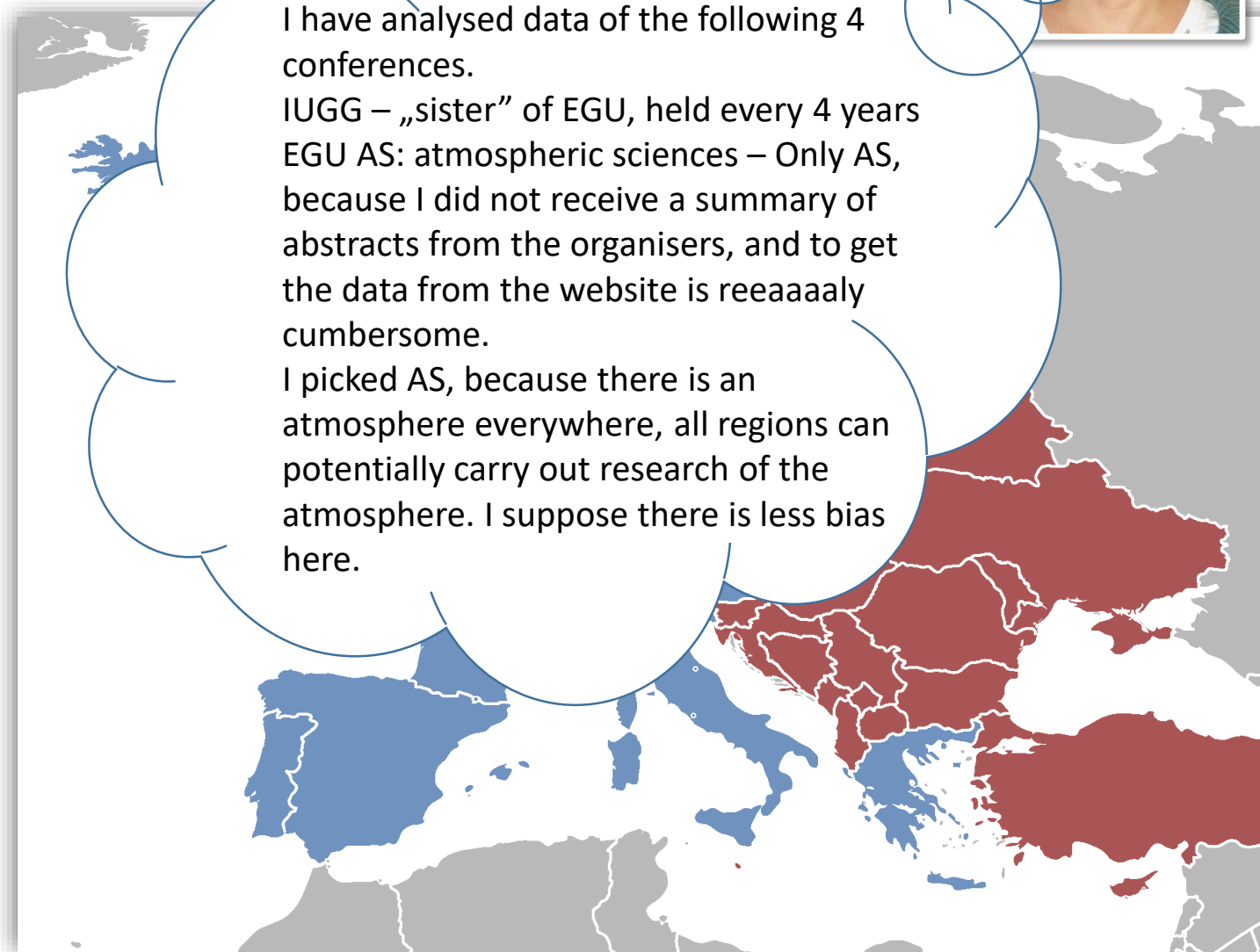
Conference participation statistics are presented:

- IUGG (International Union of Geodesy and Geophysics)
- EGU2019 – atmospheric sciences session
- EPSC (European Planetary Science Congress)
- ESPM (European Solar Physics Meeting)

I have analysed data of the following 4 conferences.

IUGG – „sister” of EGU, held every 4 years  
EGU AS: atmospheric sciences – Only AS, because I did not receive a summary of abstracts from the organisers, and to get the data from the website is reeaaaaly cumbersome.

I picked AS, because there is an atmosphere everywhere, all regions can potentially carry out research of the atmosphere. I suppose there is less bias here.

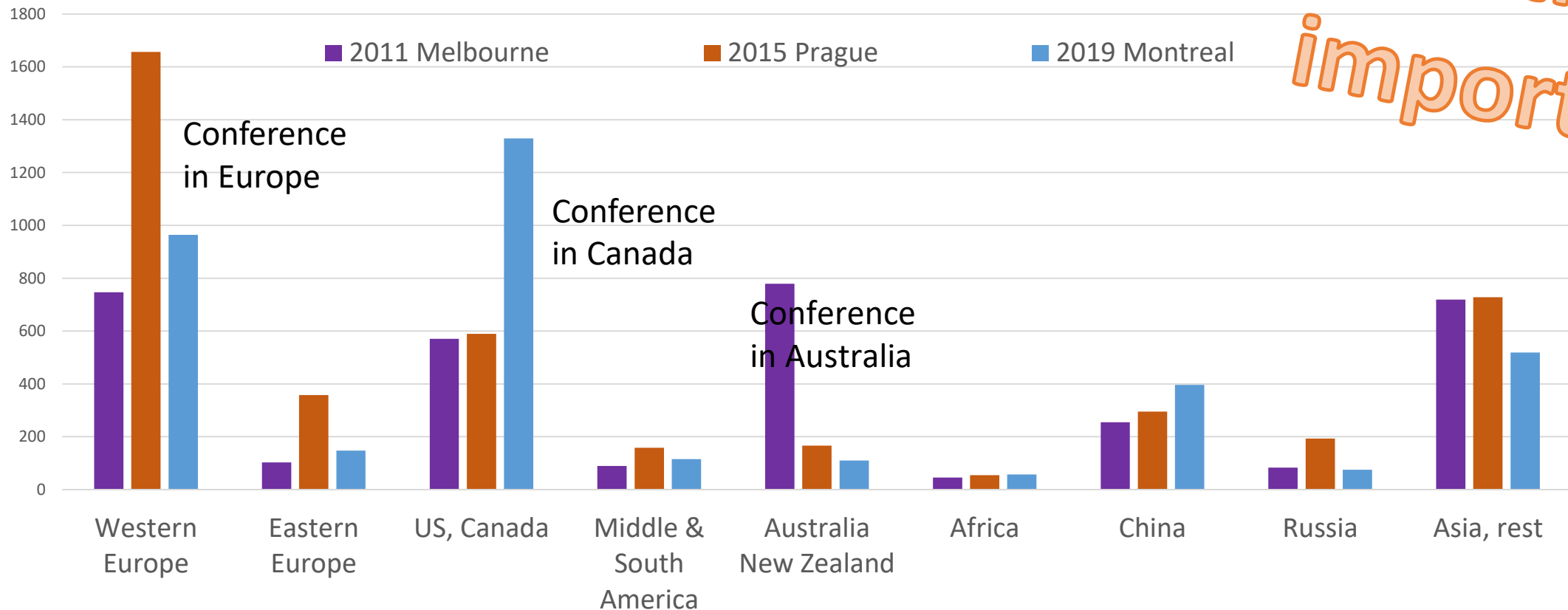


# Global participation rates IUGG 2011, 2015 & 2019

Participation from the different regions at the last 3 IUGG meetings. The 3 meetings were held on different continents. Each time the „local scientists” have the highest participation rates.



Nr of participants from different regions



*Location is important!*

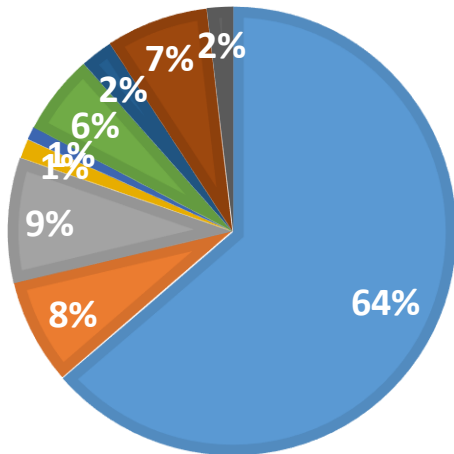
# Eastern vs. Western European participation rates: EGU

EGU participation of the last 3 years shows a similar trend:

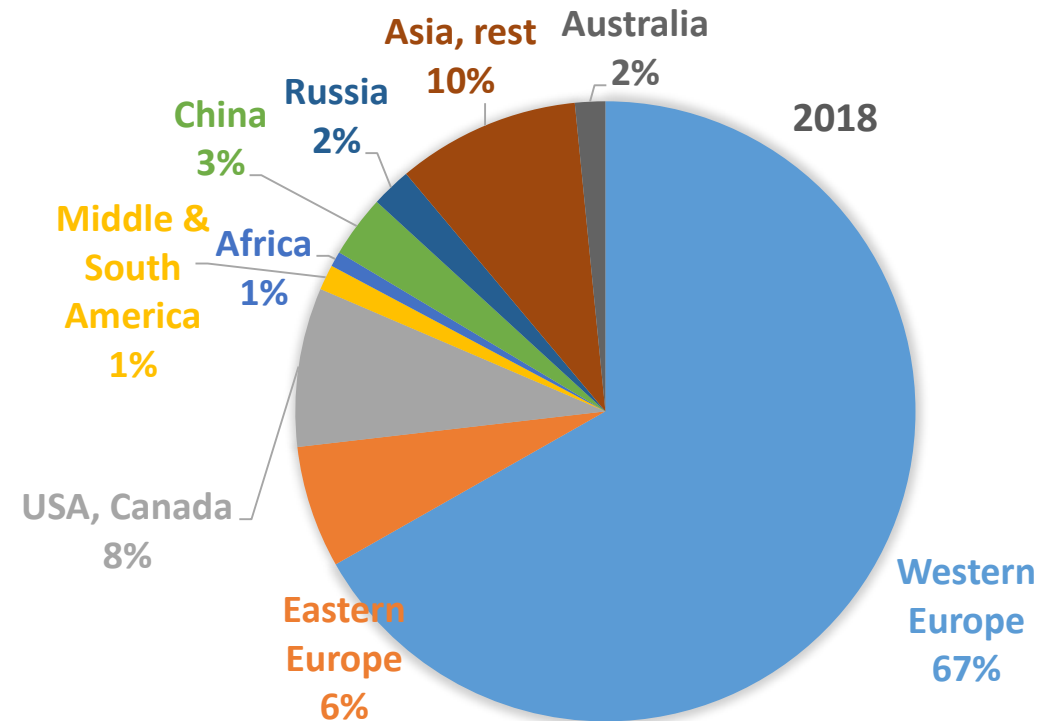
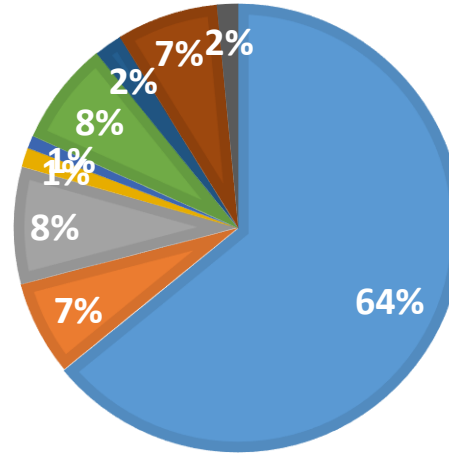
- vast majority (above 70%) from Europe
- The division between Eastern and Western Europe is 6-8 % versus 64-67%
- If normalised to the number of authors in these regions, the number of Western participants should be 4 times the number of Eastern European participants. (e.g. 15% - 60%)

If normalised to the number of authors per country, ideally:  
Western participants ~ 4\* Eastern Participants  
(see Matenco et al, 2019.)

2017



2019



EGU over the last years: **6-8 % vs 64-67%**

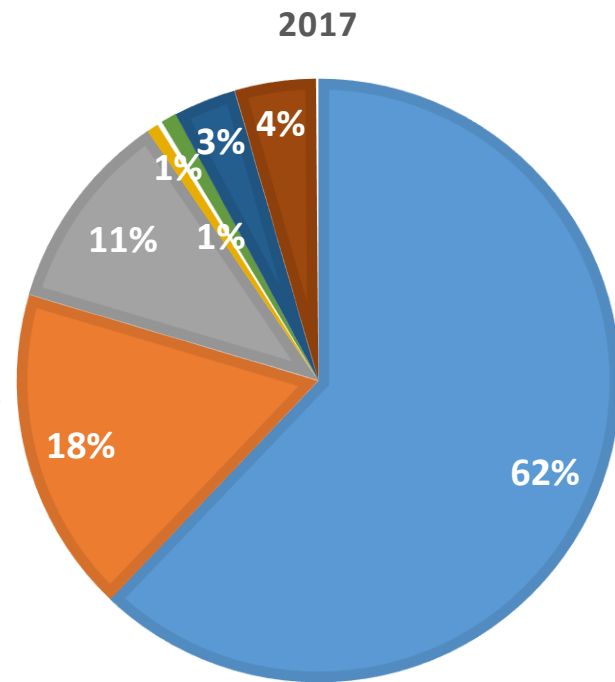
# Eastern vs. Western European participation rates: EPSC

If normalised to the number of authors per country, ideally:  
Western participants ~ 4\* Eastern Participants  
(see Matenco et al, 2019.)

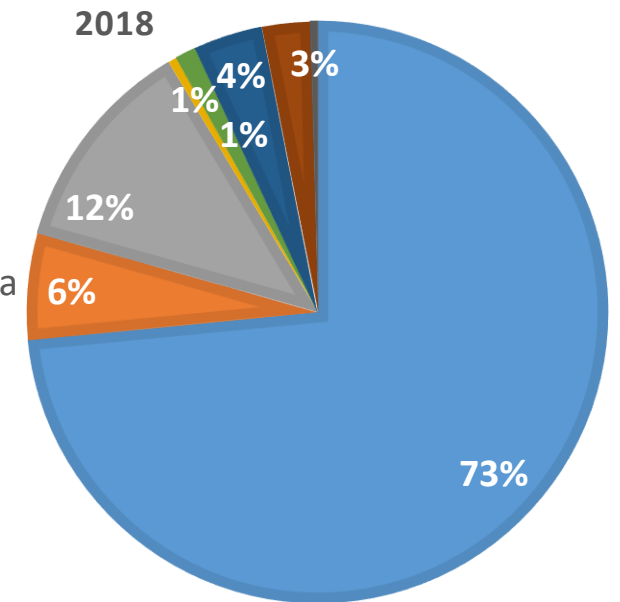
The planetary science congress held in Eastern Europe attracted a large number of Eastern Europeans!

This will be our first success story to analyse in detail.

**SUCCESS  
STORY Nr1**



EPSC Riga (Eastern Europe)  
**18% (!)**

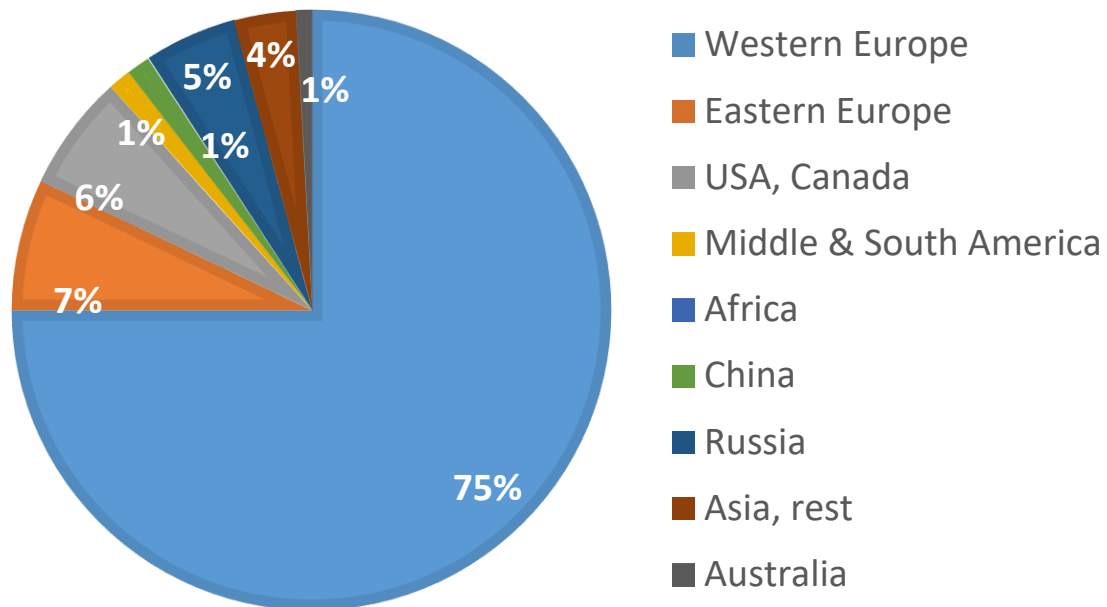


EPSC Berlin  
**6%**

# Eastern vs. Western European participation rates: **ESPM**

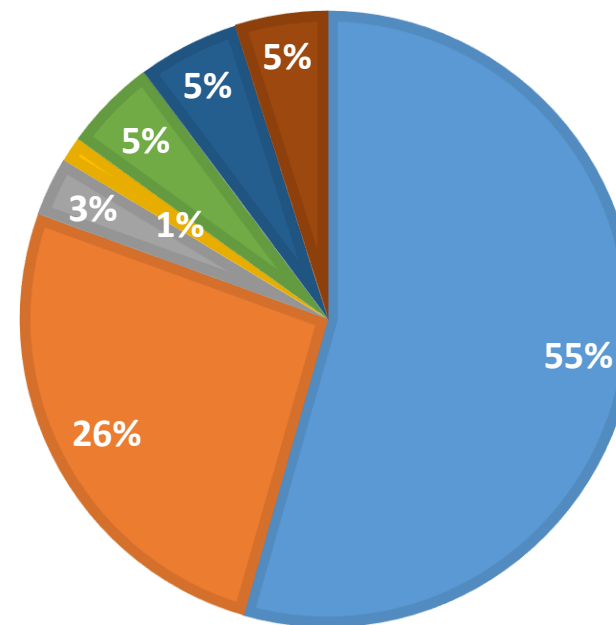
If normalised to the number of authors per country, ideally:  
Western participants ~ 4\* Eastern Participants  
(see Matenco et al, 2019.)

ESPM 14TH, DUBLIN



ESPM Dublin  
**7 vs 75 %**

ESPM 15TH, BUDAPEST



ESPM Budapest  
**26 (!) vs 55%**

***SUCCESS STORY Nr2***

Another meeting (in solar physics) held in Eastern Europe and attracting MUCH more Eastern Europeans...



Are they really success stories???

Is „Participation” the most important factor?

Let's have a closer look on what „participation” can mean..

- e.g.1. IUGG 2015 Prague
- e.g.2. EGU 2019 Vienna (Session AS)
- e.g.3. EPSC 2017 Riga
- e.g.5. ESPM, Budapest





# Participation: Talk vs Poster

IUGG 2015 Prague  
(4790 abstracts, 39% WEU, 9% EEU)

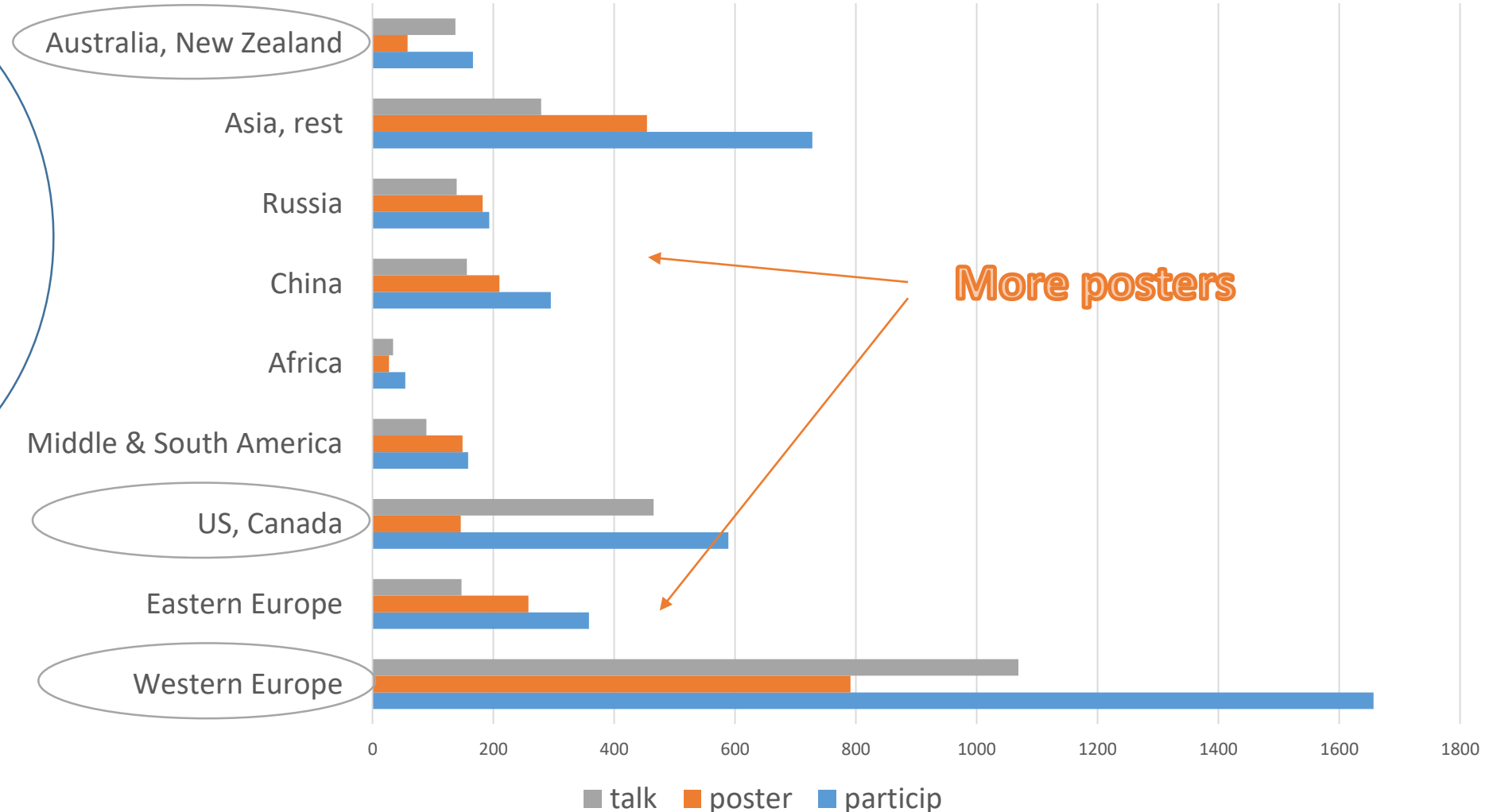
English speaking regions  
+ Western Europe tend  
to have (much) more  
talks.

Eastern Europe belongs  
to the poster-regions.



More talks

IUGG 2015, Prague

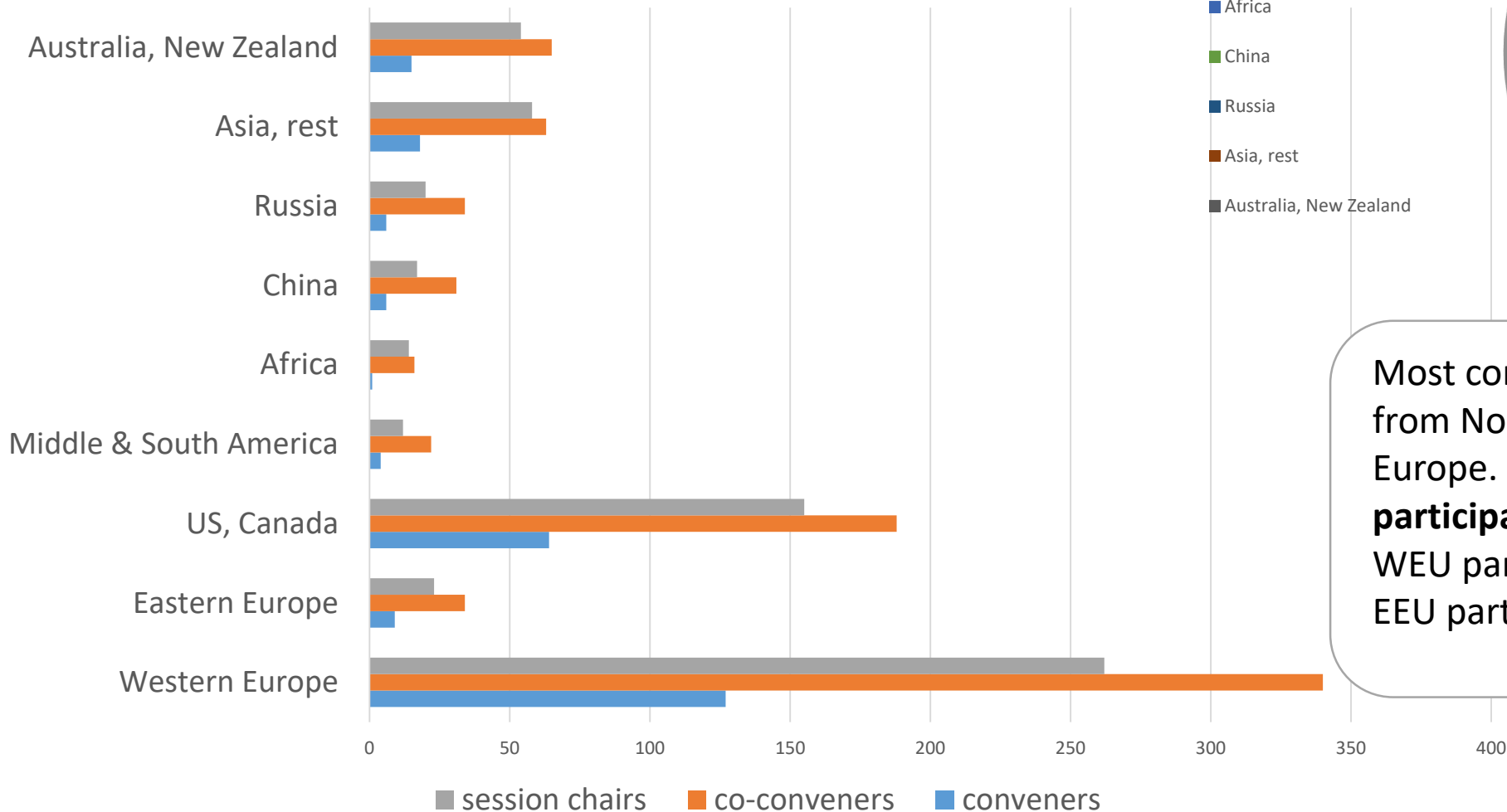




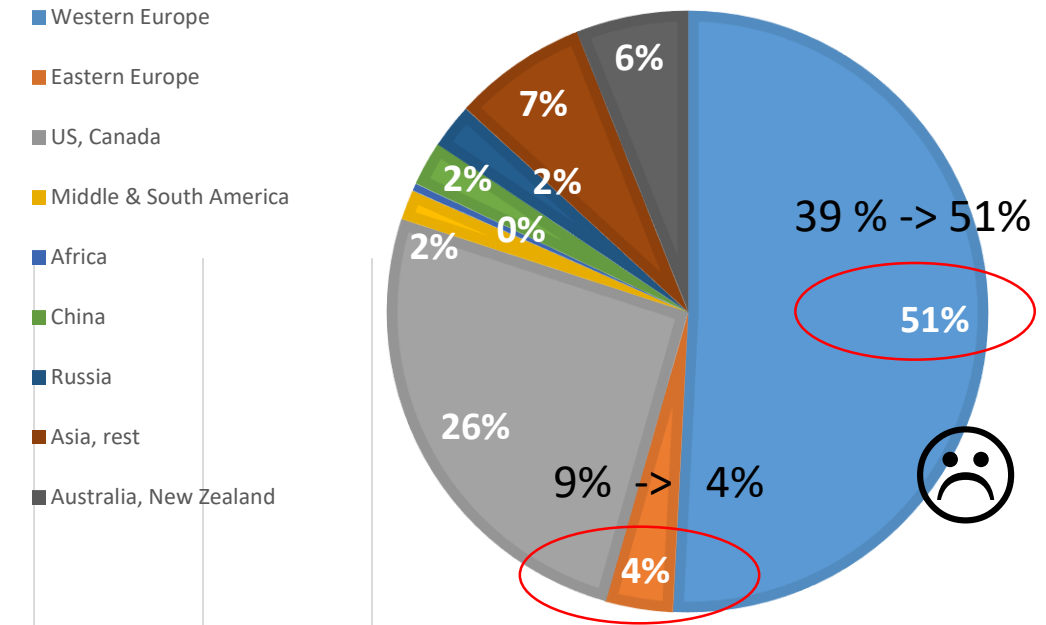
# Participation: Conveners, Chairs

## IUGG 2015 Prague

(4790 abstracts, 39% WEU, 9% EEU)



### CONVENERS



Most conveners and session chairs are from North America or Western Europe. **Much more, than the participation rates would suggest...**  
WEU particip.: 39%, WEU conv. 51%  
EEU particip.: 9%, EEU conv. 4%



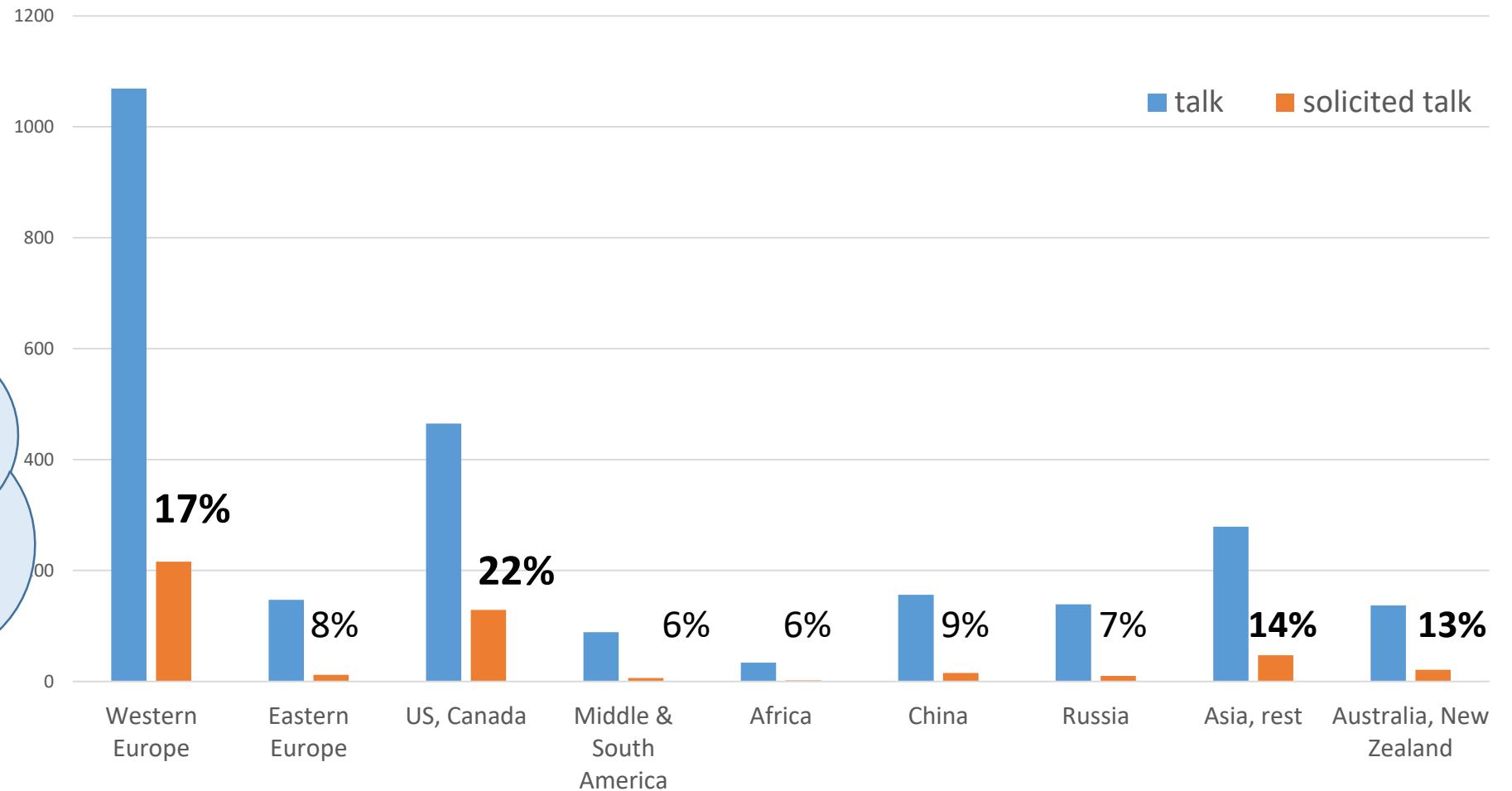
# Participation: Talks & solicited talks



Western Europe and North America:

Much higher percentage of talks are solicited / keynote talks

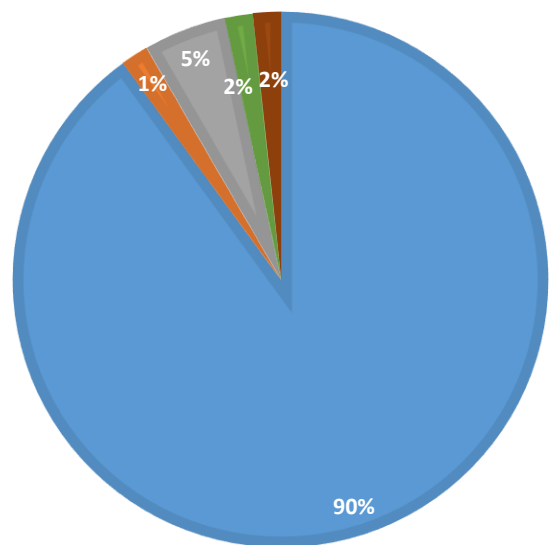
IUGG 2015 Prague



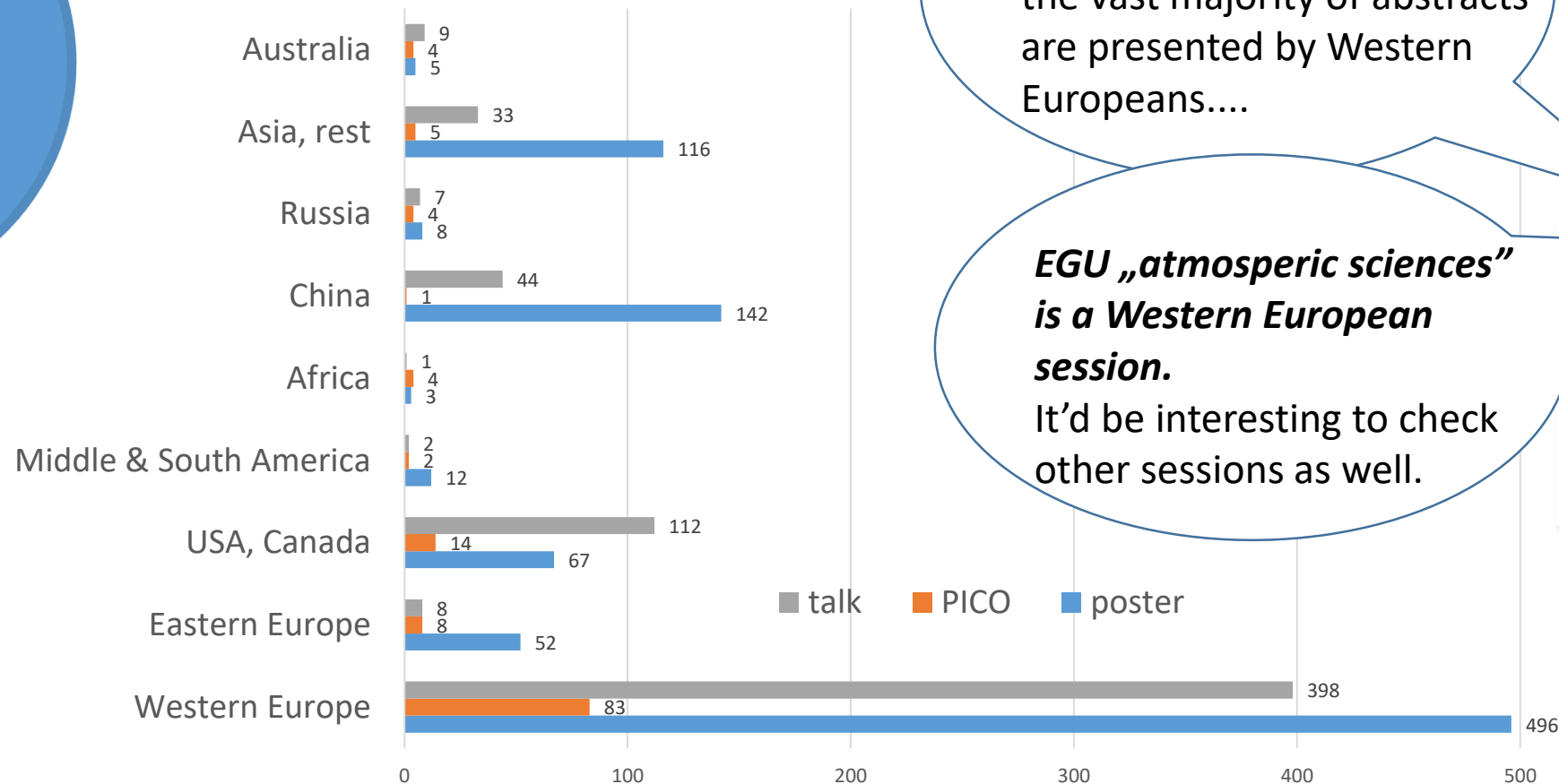
# Participation: Talk vs Poster, Conveners

EGU 2019 session:  
atmospheric sciences  
(1650 abstracts, 60% WEU, 4% EEU)

CONVENERS



EGU 2019



- 90% of the conveners come from Western Europe
- the vast majority of abstracts are presented by Western Europeans....

***EGU „atmospheric sciences” is a Western European session.***

It'd be interesting to check other sessions as well.



And what's the situation with our success stories?

- e.g.3. EPSC 2017 Riga
- e.g.5. ESPM, Budapest

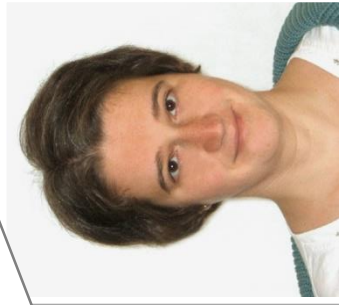



# Participation: Talk vs Poster, Conveners


EPSC 2017 Riga

(926 abstracts, 62% WEU, 18% EEU)

	Western Europe	Eastern Europe	Non-Europe
Total number of abstracts	643	63 ~7% of all abstracts	220
Oral presentations	392	27 ~5% of all orals	130
Keynote talks	22	0	15 (all from US)





Eastern European participants at Riga made up 18% of all participants. 

**BUT** only 7% of the abstracts were presented by Eastern Europeans, and only 5% of talks were made by EEU scientists. 

# Participation: Talk vs Poster, Conveners

ESPM 2015 Budapest  
(255 abstracts, 56% WEU, 25% EEU)

	Western Europe (Participants: 56%)	Eastern Europe (Participants: 25%)	Non-Europe
Total number of abstracts (Oral + poster)	149	57 ~22% of all abstracts 	49 (Why so low??)
Oral presentations	49	10 ~14% of all orals	11
Keynote talks	17	1 (4.5% of all keynotes, no local) 	4

Active participation of Eastern Europeans is much better:  
57 abstracts: **22% of total**

14% of talks and 4.5% of  
keynotes is a very low  
number at such a high  
participation rate.



# Conclusions

- Location predefines global participation rates
- Eastern Europe is underrepresented in European conferences
  - participation rate is ~6-8% , it should be ~15%
- Organising meetings in Eastern Europe boosts local participation
- **Active participation** (conveners, talks, keynote) of Eastern Europeans is still to be supported.
- Invite at least 1 local keynote speaker, encourage locals to show their expertise.



*VIRTUAL CONFERENCES are a new possibility for Eastern Europe or anybody who is unable to travel.*

*Let's create a new genre, see the positive sides and go online 😊*