



# Interdisciplinary research in the European Cooperation in Science and Technology – advantage or disadvantage?

Zoran R. Mijić and Bratislav P. Marinković

Institute of Physics Belgrade, Pregrevica 118, 11080 Belgrade, Serbia E-mail: zoran.mijic@ipb.ac.rs



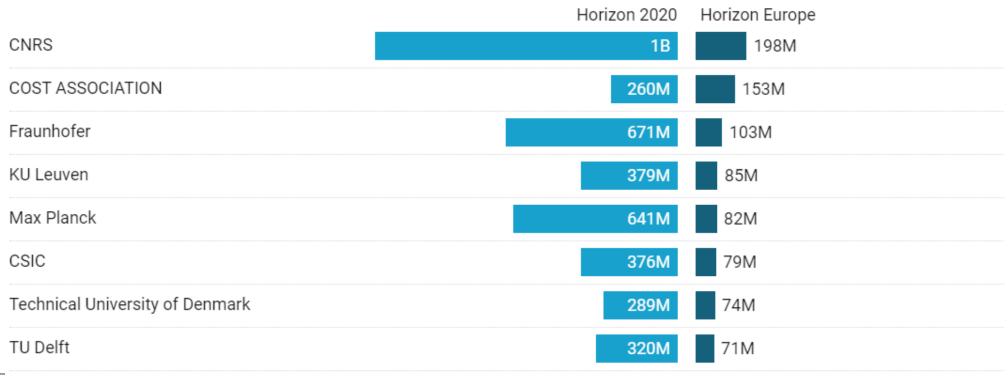




### Top winners in the first two years of Horizon Europe – compared with seven years of H2020

### Top winners in the first two years of Horizon Europe – compared with seven years of Horizon 2020

How much each institution has received from EU research frameworks, in euros







#### OC 2022-1 timeline

	RP Mer	mbers					MC Nom	inations
Submission	Evaluation (+Review)		Selection		Approval (+MoU publication)		Start Pl	nase
374 proposals	346 evaluated	325 app 21 nap	63 Green zo 55 Ex Grey Z		70 Act	ions		
	858 iEEs	46 RPMs						
ELEPTAN CONTRACTOR  18 STEINES & THE SHATTER	Collection Date		07-09.03.2023 RP Meetings	03-04.05.2023 . SC Meeting	16.05.2023	Proposers intormed CNC informed	Wou Publication  Palić, 12-1:	3 5 September



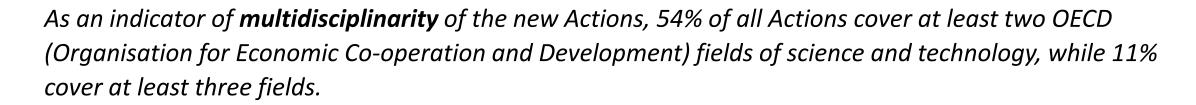
#### The 70 new Actions in figures

19% of main proposers are young researchers

**47%** of main proposers are women

66% of the proposals feature participants from industry/SMEs

**26%** of main proposers come from an Inclusiveness Target Country (ITC)



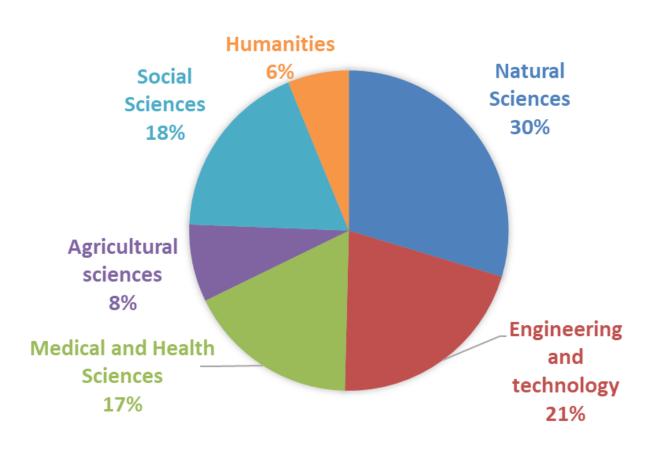
Natural Sciences lead the way as the most represented field of science (represented in 49% of the Actions), followed by Social Sciences (27%), Engineering and Technology (27%), Agricultural Sciences (26%), Medical and Health Sciences (20%), and Humanities (19%)

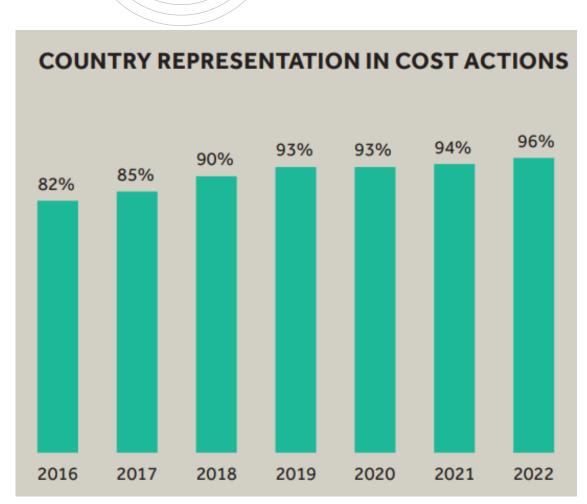
Success rate: 18.7%.

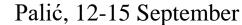




#### **SERBIAN PARTICIPATION OC-2015-2021**

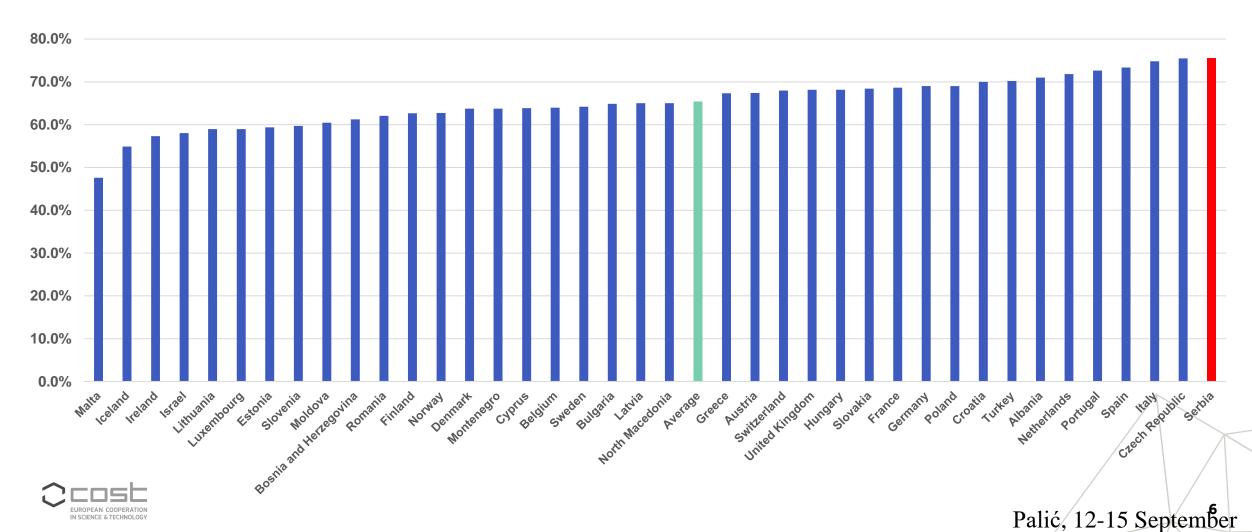






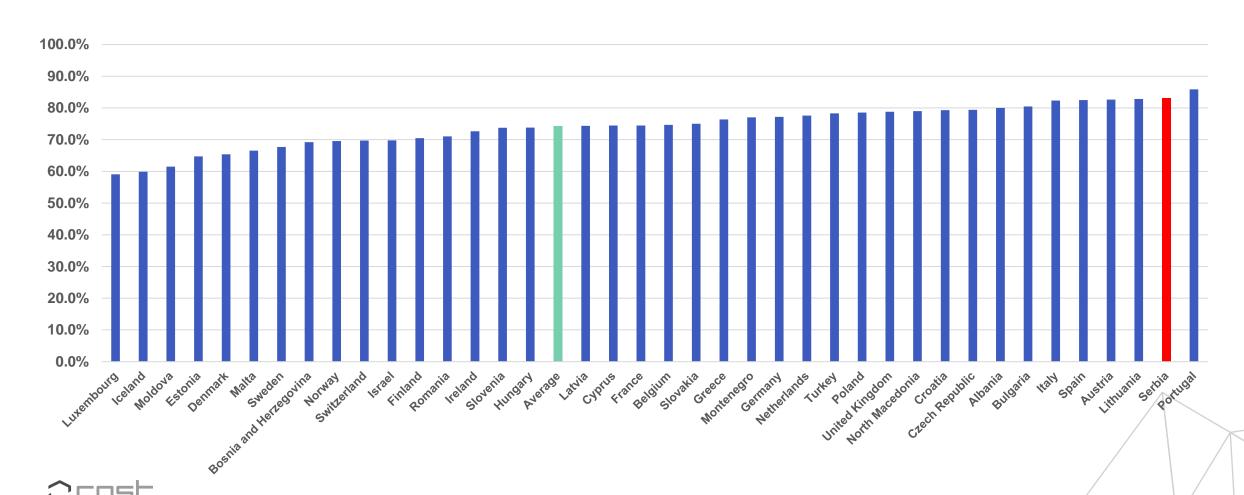
### INSTITUTE OF PRIVATES | BELGRADE | NATIONAL INSTITUTE OF SERBIA

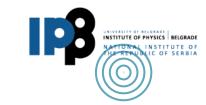
### Average response rate to meeting invitations by MC members



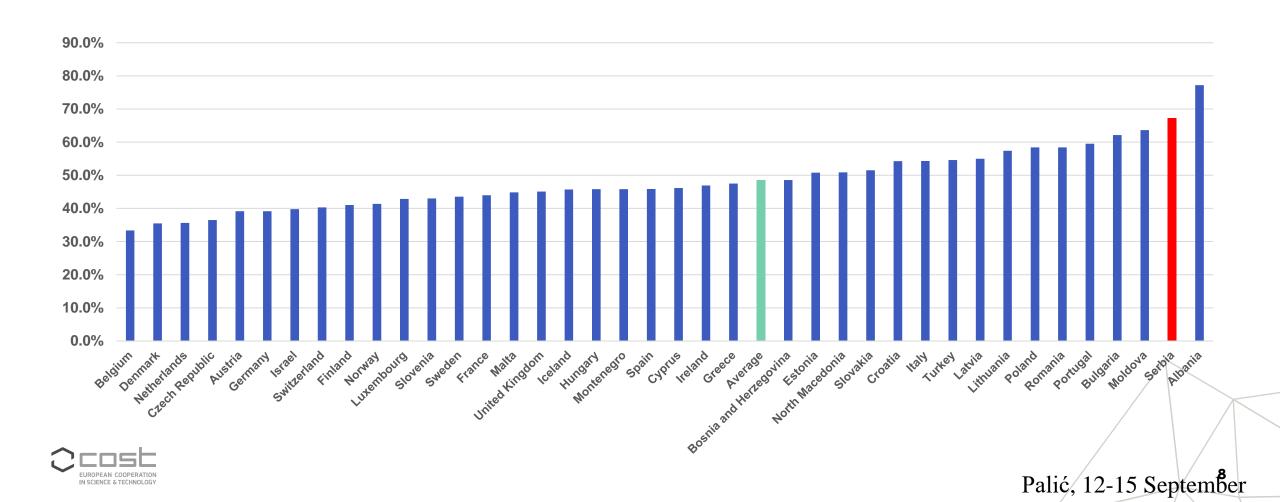


### Percentage of MC Members having attended at least one MC meeting



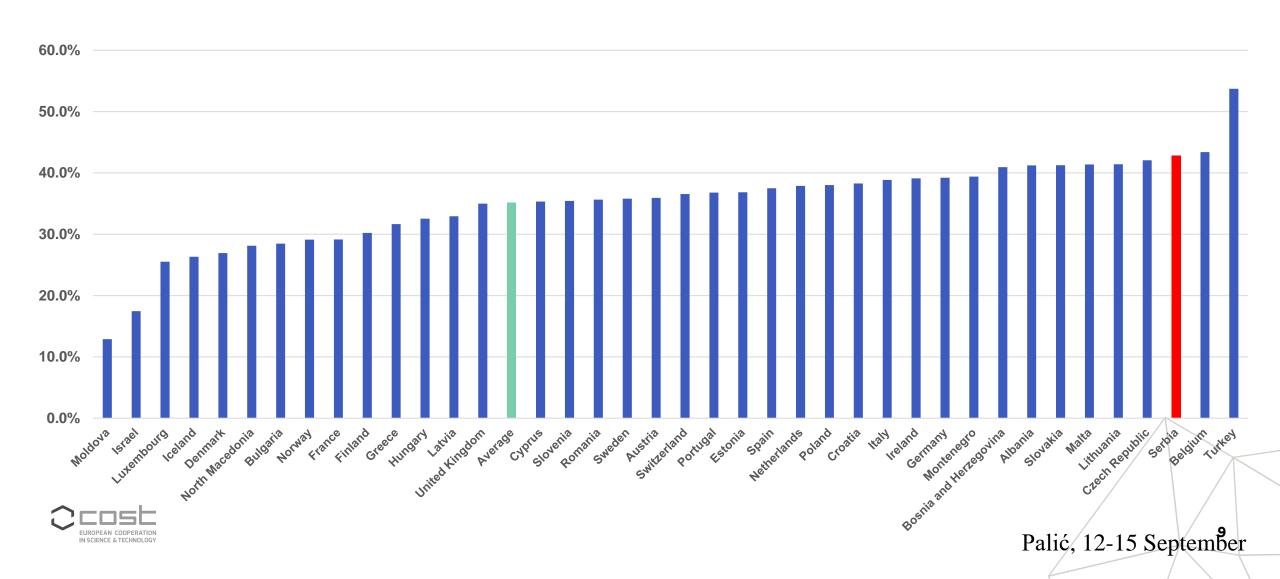


#### Percentage of women among MC members





#### Mobilisation of young researchers in Actions





Proximity is important to establish a collaboration

Yet: Once established, scientists manage to continue collaborating from long distance and for a long time (!)

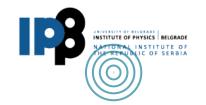
- → Participation in **COST Actions create proximity**
- → What impact on the collaboration between (active) members?





- 1) The impact of COST Actions on scientific collaboration
- 2) Are interdisciplinary proposals disadvantaged in COST?





#### **DATA**

- 385 Actions (starting 2011-2016, ending by 2020) +
   67 proposal not funded (control)
- 27,210 participants (20,854 77% active members)
- 746,763 + 161.117 publications of the Action members from 2008 until 2020

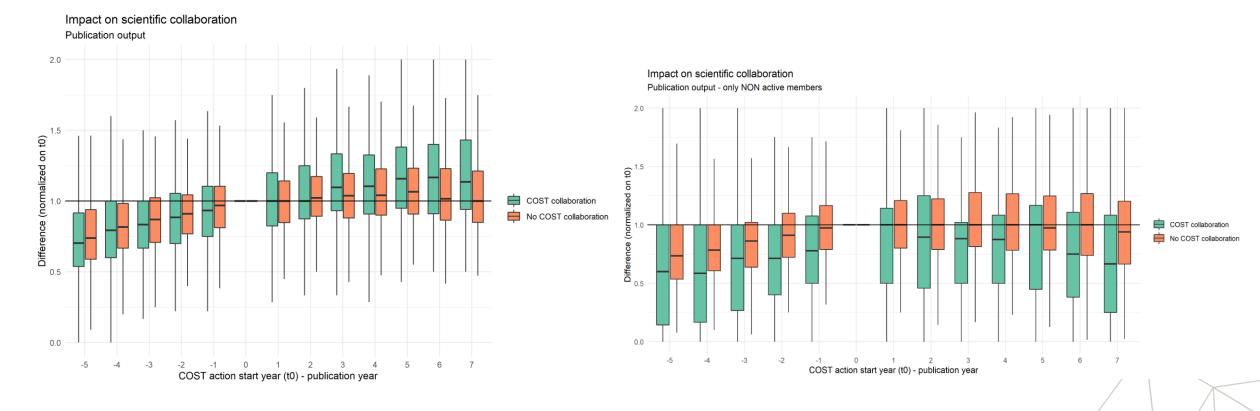




#### Collaboration with other COST members vs. Other collaborations

#### **Active members**

#### **NON- Active members**



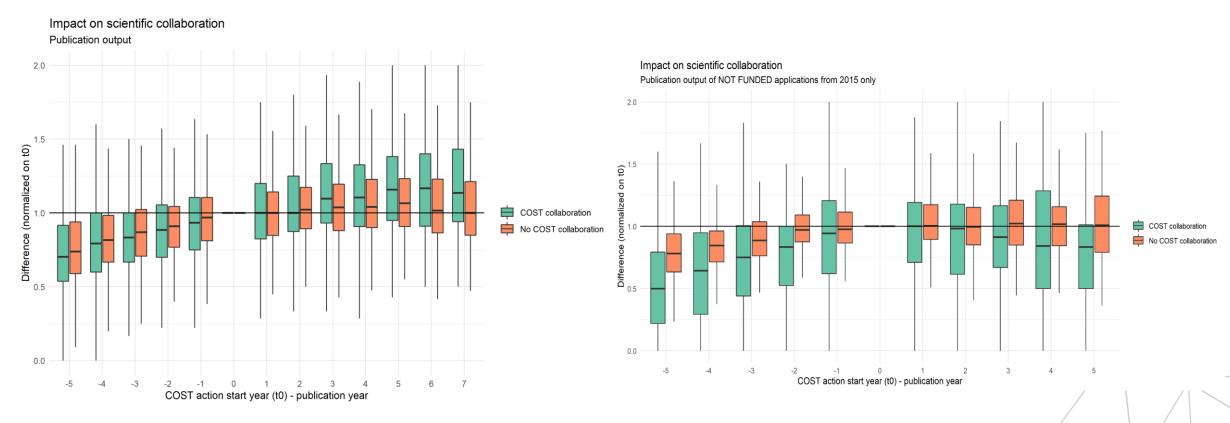




#### Collaboration with other COST members vs. Other collaborations

#### **Active members**

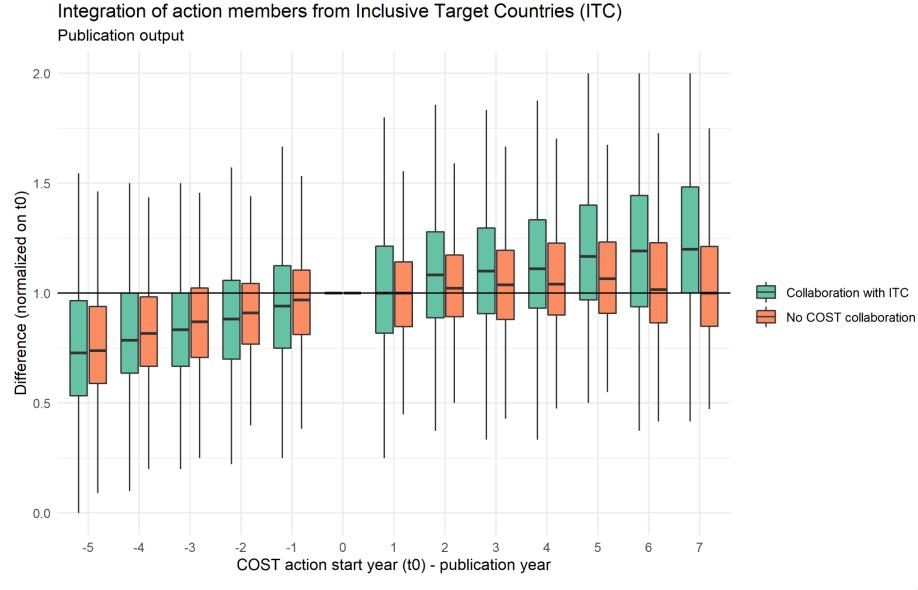
#### **NOT FUNDED ACTIONS**





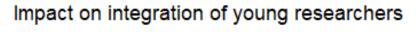
#### V Meeting on Astrophysical Spectroscopy - A&M DATA

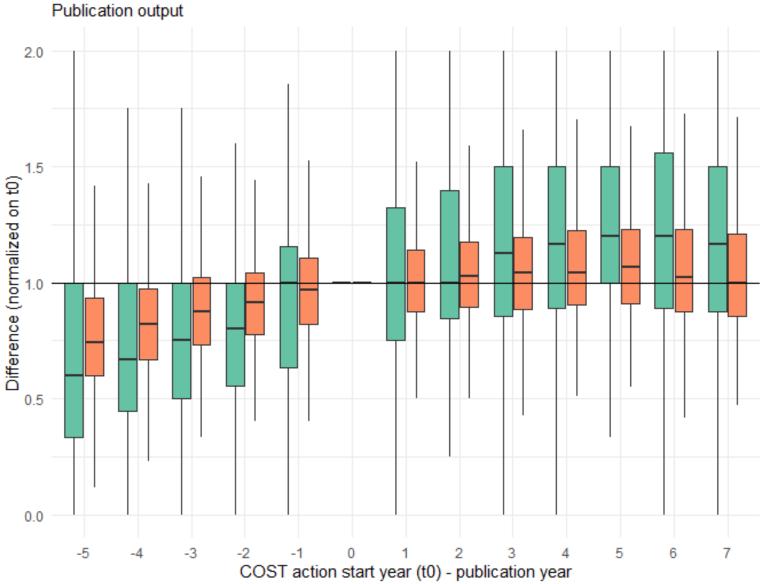


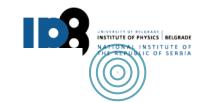




#### V Meeting on Astrophysical Spectroscopy - A&M DATA

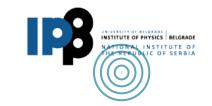






COST collaboration with a young researcher
No COST collaboration





### Positive effect on productivity! Which does not come at the expenses of non collaborative publications

publication year from start Action >		0	1	2	3	4	5	6	7
collaborative publications	active	0,0%	0,0%	0,0%	9,8%	10,5%	15,8%	16,7%	13,6%
	non-active	0,0%	0,0%	-10,6%	-11,8%	-12,5%	0,0%	-25,0%	-33,3%
	not funded*	0,0%	0	-1,8%	-8,7%	-15,8%	-16,7%	n.a.	n.a.
non- collaborative publications	active	0,0%	0,0%	2,2%	3,9%	4,1%	6,6%	1,6%	0,0%
	non-active	0,0%	0,0%	0,0%	0,0%	0,0%	-2,7%	0,0%	-6,1%
	not funded*	0,0%	0,5%	-0,3%	2,3%	1,8%	0,9%	n.a.	n.a.

<sup>\*</sup>Actions submitted in 2015

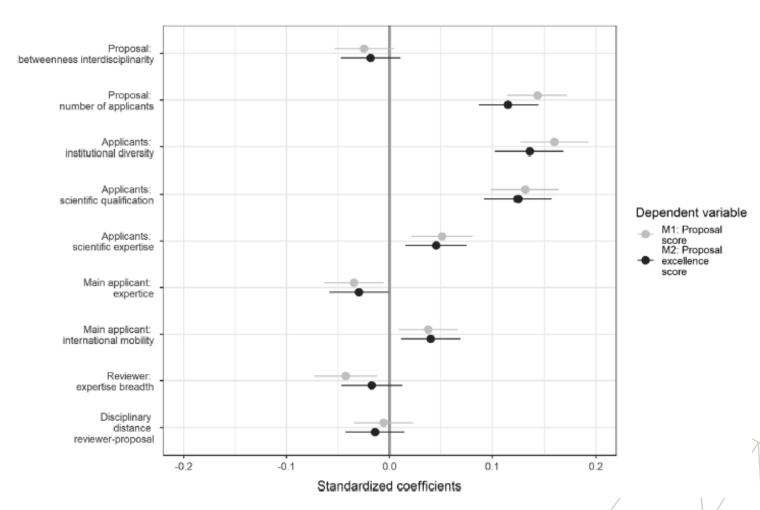




## COST unique approach: a **panel free** system

In COST, the degree of interdisciplinarity of a proposal does not affect the evaluation score

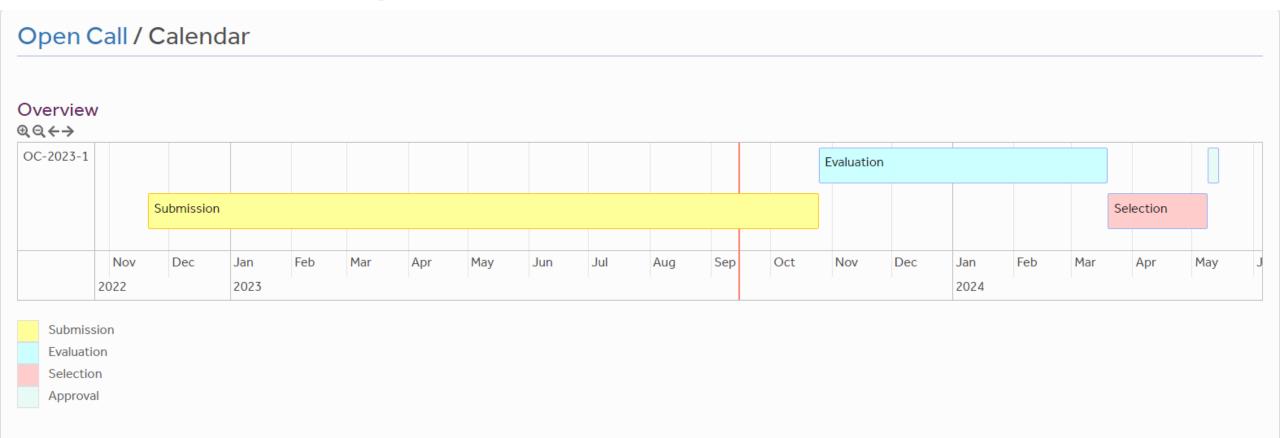
#### Predictors of proposal score







#### **Open Call 2023 – October 25 2023**









http://mail.ipb.ac.rs/~ncc-serbia/index.php



Contact: ncc-serbia@ipb.ac.rs

