

# **IFAST**

## **IIF status of the play**

IFAST STC, Sept 27, 2022

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CERN



# Background and aim

IIF discussed in STC in Feb. 2022

Discussed and approved by GB on May 2022

CfT launched on July 2022

Deadline for Project proposals Sept. 15<sup>th</sup>

***1<sup>st</sup> Phase of evaluation is now, ending 31<sup>st</sup>***

# IIF: Internal Innovation Fund

fast-tracked, competitive and innovative projects sponsored by WP4 in I.FAST

- It is directed towards the 9 thematic I.FAST areas
- It will finance innovative projects: development and/or prototypes, contributing 100 to 200 K€, till the reaching of budget cap (1 M€ + *200 €K to be confirmed by PC*)
- 2 rounds of evaluations, projects will start **January 2023**
- Projects selected in round 1 that will not make to round 2 will be all the same advertised and promoted in IFAST community and in our networks (web site & newsletters)
- It is an important investment for our project: IIF budget is equivalent to 10% of the project total requested EC contribution!

# IIF: summary of rules of engagement

## Requirements for eligibility

- Participants to proposals must include of at least 1 IFAST beneficiary
- Must be related to the key Thematic Areas of I.FAST, and advancing accelerator technologies in the quest of protecting environment.
- Must include at least 1 industry
- Proposals must contribute to improve sustainability of future accelerators
- The idea or concept must have a potential for industrial or commercial application
- Almost deployable-ready technologies: technical maturities at least TRL4 (validated in laboratory)

## IFAST thematic areas

1. Novel particle accelerators concepts and technologies
2. High brightness accelerators for light sources
3. Innovative superconducting magnets
4. Innovative superconducting thin film coated cavities
5. Advanced accelerator technologies and materials
6. Sustainable concepts and technologies
7. Societal applications
8. Technology Infrastructure

# EvB Composition:

## *4 women, 6 men*

C. Antonie, CEA  
M. Baylac, CNRS  
G. Bisoffi, INFN  
A. Faus Golfe, IAB chair  
P. Fork, GSI, WP5 coordinator  
R. Geometrante, Kyma SpA  
M. Losasso, CERN, chair  
Z. Melhem, Oxford Quantum Solutions Ltd  
M. Morandin, WP3 coordinator  
C. Welsh, University of Liverpool  
M. Vretenar, CERN, PC, ex-officio  
1 representative of IAB, according to technical needs of project's evaluation

## Role:

- To score received projects according to common and consistent Criteria as agreed by STC/GB
- It will maintain confidentiality
- It will ensure Not-Conflicting Interests
- It will ensure fair competition  
(all project assessed according to same rules)
- It will ensure equality of treatment

# Timeline

2022												2023	
15-Feb	2-May	1-Jul	15-Sep			17-Oct		31-Oct	15-Nov		1-Dec	15-Dec	
STC approval of the procedures for IIF	presentation of the IIF to the IFAST AM	STC appointment of Evaluators Committee	deadline to submit project	OS, DE	EP,DE,PER	CE, end of 1st evaluation round	EP,DE,PER	NOT, notification to first 10 selected projects	live presentation from selected proposals	OS, SE,PER	end of 2nd evaluation round	AGB, Award by GB	NAD, Notification of the award decision to the proposals

meeting & reporting preparation													
1-Feb	2-May					14-Oct		28-Oct			TBD		
presentation to STC of the consolidated IIF documentation	Annual Project Meetings					CE (meeting of Evaluators to consolidate results and reports)		CE (meeting of Evaluators to consolidate results and reports)			CE (meeting of Evaluators to consolidate results and reports)		

OS			Opening session and Administrative Evaluation
DE			Digital Evaluation process (1st round)
SE			Evaluation Process (2nd round)
CE			Consolidation of the results (meeting of Evaluators)
PER			Preparation of evaluation report
NOT			Notification to first 10 scored Proposals and Presentaiton at CERN
AGB			Validation of the recommendations and final award decision by GB
NAD			Notification of the award decision to the tenderers

Marcello Losasso– WP4 – I.FAST OSC Meeting Sept 2022

# Preliminary data on received projects (TBC after EvB analysis)

**2.5 Meur** Total budget requested

**17 projects presented,** but 16 projects eligible

7 projects requesting 200 KEur

9 projects requesting from 115 KEur to 160 KEur

Organisation Name	Project title	budget requested
Wigner Research Centre	Superconducting opposite-field septum magnet prototype	<u>152.5</u>
CERN	High-Temperature High-Gradient Superconductors	<u>160</u>
CERN	Permanent magnet solenoid for High efficiency Klystron	<u>115 .0</u>
Uppsala University	Development of highly efficient megawatt class cross field vacuum tube amplifier for particle accelerators driven by a solid-state power amplifier at 750 MHz	<u>200 KE</u>
European Spallation Source ERIC	inBEST	<u>129</u>
CIEMAT	BASE3	<u>200</u>
CERN	MAGNETRONS	<u>150</u>
CNRS	KAIO-Accelerator	<u>200</u>
CEA	High-quality Electron Accelerator driven by a Reliable Laser for Industrial uses (EARLI)	<u>200</u>
RHP Technology GmbH	Demonstration of additive manufacturing for large and complex shaped vacuum chambers by Plasma Metal Deposition	<u>100</u>
INFN SEZIONE DI PADOVA	AM applications of refractory metals for ION Sources	<u>100</u>
Istituto Nazionale di Fisica Nucleare	Millisecond flash lamp treatment for SRF accelerating cavities	<u>160</u>
CERN	UTMOST CLEEN Atmosphere: Ultra-Thin Membrane Overlay SStacks to Channel Low Energy ElectroNs to Atmosphere	
Paul Scherrer Institute	A Field Emission Cathode for a Travelling-Wave RF gun for High Brightness beams in Industrial and Small Research Facility Settings	<u>200</u>
GSI	Software Defined Radio based custom signal analysis and generation tool	<u>200</u>
GSI	Graphenic foil stripper for high intensity particle beams	<u>150</u>
Politecnico di Milano	Electron guns for societal applications exploiting opportunities offered by additive manufacturing	<u>200</u>



# Conclusion

The answers received from community has been good, in quantity and quality

Exercise is well on track

Evaluation will soon be completed

Project selected will be financed and monitored

Next step: define project monitoring, money transfer to funded projects.