

FLAG-ERA

The ERA-Net for supporting the FET Flagships

www.flagera.eu

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The 2 missions of FLAG-ERA

Networking the funding organizations regarding Flagships topics

Coordinating the efforts of the funding agencies to promote the Flagship initiatives

Enabling; Facilitating; Improving The dialogue from the Flagships toward the research communities, and the contrary around Launching and managing transnational calls

Funding the best transnational initiatives in the domain of the Flagships

Flagship Partnering Projects





FLAG-ERA Transnational calls Scope & Outreach

Mostly Trans-disciplinary projects

ICT related Flagship Pilot Projects

ICT and / for Material Sciences: Graphene Basic and Applied Research

ICT and / for Neurosciences: HBP computing neuroscience 23 countries with funded projects From which 9 widening countries

30% success rate on the cofunded calls

71 funded projects Representing 378 participants

Effective funding **53,1 M€**

New Flagship Partnering Projects



FLAG-ERA calls: distributionFunding&Projects



FLAG-ERA

Supported by the

European

Commission

FLAG-ERA in Horizon Europe

Announced on November the 30th 2020

Supported by the

Country		Funding agency	Graphene	Graphene	HBP
			Basic	Applied	
BE	Belgium	FNRS			
BE	Belgium	FWO			
BG	Bulgaria	BNSF			
DE	Germany	DFG			
ES	Spain	AEI			
ES	Spain (Asturias)	IDEPA			
ES	Spain	ISCIII			
FR	France	ANR			
HU	Hungary	NKFIH			
IL	Israël	Innov Authority			
LT	Lithuania	LMT			
LV	Latvia	VIAA			
NL	Netherlands	ZonMW			
RO	Romania	UEFISCDI			
SE	Sweden	VR			
SI	Slovenia	MIZS			
SK	Slovakia	SAS			
TR	Turkey	TUBITAK			

- Consortia must be international;
- Consortia must be **balanced**, regarding the participations of the partners (and the funding);

- Furthermore, FLAG-ERA promotes:
 - Participation of widening countries;
 - Gender balanced consortia.

1 step procedure

European

Commission

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Information webinar will take place on January the 19th 2021

Graphene Basic Research dedicated sub-call

- Layered magnetic materials and heterostructures
- Growth and device integration of two-dimension amorphous material
- Scalable growth & device integration of ultralow power spin-orbit memories based on GRMs
- Bacterial degradation of GRMs

AG-FRA

- GRM based devices and circuits for neuromorphic computing
- Infrared+THz emission and detection with twisted GRMs
- Functionalized GRMs for advanced multivalent metal-ion batteries (MMIBs)
- Chemical sensing with GRMs
- Mxene foams for capacitive deionization water desalination
- Rheological models for GRM suspensions and multiphase flows

- Antiviral protection with GRM-based foams and coatings
- GRM-based neural interfaces for bioelectronics medicines
- GRM-based spectrometer for visible and infrared
- GRM-based, ultra-broadband THz-transceiver technologies for 6G compliant wireless communication
- Tuning the hot-carrier lifetime in layered materials heterostructures for photoresponsivity enhancement
- GRMs for advanced metal-ion supercapacitors
- GRM-based electrodes for redox flow batteries
- GRM components for self-charging and self-powered electronics

Human Brain Project dedicated sub-cal

The projects should propose **holistic approaches combining computer sciences and neurosciences** to address at least one of the following aims:

- Studying genotype-phenotype relationships related to brain function. projects dealing with anatomical as well as functional phenotypes in animal models as well as in large human cohorts are eligible.
- Tackling psychiatric diseases. Research projects developing diagnostic, patients stratification or treatment strategies for Psychiatric Diseases by combining diverse types of clinical data as well as data covering social aspects of these diseases including subjective well-being are eligible.
- Accelerating the diagnosis and the development of therapeutic approaches for rare diseases affecting the nervous system. Clinical and preclinical proposals making use of available medical or preclinical datasets for or simulation studies are eligible.

The projects falling within the scientific scope of this call for proposals are invited to consider using the following eBRAINS resources (<u>https://ebrains.eu</u>)

