

CORE GROUP MEETING

9/11/ 2023

Alessandro Mirizzi	X			
Francesca Calore				
Sophie Renner				
Michele Cicoli	X			
Edoardo Vitagliano	X			
Javier Redondo				
Oscar Straniero				
Andrea Caputo				
Claudio Gatti				
Marin Karuza	X			
Olga Mena				
Loredana Gastaldo				
Pierluca Carenza				
Venelin Kozhuharov				
Mirela Babelic	X			
Maria Benita Castano				
Serkant Cetin				
Cerci Deniz Sunar	X			

W&B Plan for 2024 approved and signed.

Grant Agreement Period Goals

Number	Grant Agreement Period Goal	MoU Objective(s) it relates to
GAPG 1	To explore the WISP production mechanisms from astrophysical sources (Sun, stars, supernovae) and provide numerical tables, fitting expressions and plots to characterize these fluxes (WG3)	<ul style="list-style-type: none"> • Secondary objective 4
GAPG 2	To cover the WISP parameter space in well-motivated benchmark theoretical models, e.g. QCD axion band in the ALP parameter space, Dark Matter Axion window, mass and coupling of axions from string compactification (WG1)	<ul style="list-style-type: none"> • Secondary objective 4 • Secondary objective 6
GAPG 3	To train Phd students and young post-docs on specific topics of each WG, building on the common background acquired in the 1st Training School	<ul style="list-style-type: none"> • Secondary objective 8 • Secondary objective 11 • Secondary objective 12 • Secondary objective 13
GAPG 4	To carry on Outreach and Dissemination activities (e.g. outreach talks in person or virtual)	<ul style="list-style-type: none"> • Secondary objective 7 • Secondary objective 8 • Secondary objective 12
GAPG 5	To explore the role of quantum technologies in next-generation WISP experiments, directly involving representatives of the SMEs	<ul style="list-style-type: none"> • Secondary objective 1 • Secondary objective 7 • Secondary objective 9 • Secondary objective 11 • Secondary objective 12
GAPG 6	To keep the contributions of Young Researchers and Innovators from ITC, to improve the gender balance and enhancing diversity in the Action	<ul style="list-style-type: none"> • Secondary objective 10 • Secondary objective 11 • Secondary objective 12 • Secondary objective 13
GAPG 7	To start a review on the status and future plans of international laboratories to carry on WISPs searches, to develop possible synergies and collaborations	<ul style="list-style-type: none"> • Secondary objective 1 • Secondary objective 2 • Secondary objective 5 • Secondary objective 9
GAPG 8	To study axion DM production mechanisms, in order to identify calculations required to improve relic abundance predictions (WG3)	<ul style="list-style-type: none"> • Secondary objective 4
GAPG 9	To perform a survey of novel experimental techniques proposed to search for WISPs and identify the technological challenges to be addressed (WG4)	<ul style="list-style-type: none"> • Secondary objective 4 • Secondary objective 5 • Secondary objective 6 • Secondary objective 7

Status of WG activities

- Next Meetings
- Status of deliverables
- Nomination of responsible of sub-tasks

Involvement of ITC countries (contact with Balkanic Physics Union)?

Gender balance: Committee and Plan.

We will select a couple of people to coadjuvate Deniz.

ECI Council: Nomination of new Leader?

Working Group Meeting in DESY Hamburg 1-2 Febr. 2024

Meeting Title	Meeting Type	Dates	Location	ITC	Total Cost (EUR)
Working group Meeting of CA21106 COSMIC WISPs	Working Group Meeting	01/02/2024 - 02/02/2024	Hamburg (Germany)	No	26,560.00

Start intivation of the speakers

Meeting Type(s)	Working Group Meeting		
Grant Period Goal(s) it will address	To explore the WISP production mechanisms from astrophysical sources (Sun, stars, supernovae) and provide numerical tables, fitting expressions and plots to characterize these fluxes (WG3). To corner the WISP parameter space in well-motivated benchmark theoretical models, e.g. QCD axion band in the ALP parameter space, Dark Matter Axion window, mass and coupling of axions from string compactification (WG1). To carry on Outreach and Dissemination activities (e.g. outreach talks in person or virtual). To explore the role of quantum technologies in next-generation WISP experiments, directly involving representatives of the SMEs. To keep the contributions of Young Researchers and Innovators from ITC, to improve the gender balance and enhancing diversity in the Action. To start a review on the status and future plans of international laboratories to carry on WISPs searches, to develop possible synergies and collaborations. To study axion DM production mechanisms, in order to identify calculations required to improve relic abundance predictions (WG3). To perform a survey of novel experimental techniques proposed to search for WISPs and identify the technological challenges to be addressed (WG4)		
Description	The Working Group Meeting will structure the WG activities of the GP. The plan of the meeting is the following: 1st day-morning. Plenary session with Introduction + talks by WG leaders and key talks to define the state-of-the-art of the different WG (4+4 talks). 1st day-afternoon: Parallel WG sessions (4 talks in each Session). 2 day morning: 4 talks from different international laboratories to present current and future plans for WISP searches. Common Round table to plan directions of investigations and possible collaborations among WGs. 2nd day afternoon: Technology forum (4 speakers). In order to reduce expenses, accommodation will be provided in DESY Guest-House. All the speakers [24 people] will receive reimbursement for travel and accommodation. WG Leaders will be also supported [10 people]. Chair, Grand Awarding Coordinator, Gender Advisor, ECI Coordinator will be supported. In order to guarantee a broad participation of COST members, this meeting is planned in hybrid version		
Output(s)	Definition of the working plan for the 2st GP of the different WGs. Start the interim report of different WGs. Discuss on the Communication and Dissemination Plan. Slides will be available on the Action webpage.		
Location	Hamburg (Germany)	ITC	No
Start Date	2024-02-01 09:00:00	End Date	2024-02-02 18:00:00
Duration	2 days	Attendance Type	Hybrid
Total number of expected participants	55	Number of participants expected to be reimbursed from COST funds	38

Daily allowance (EUR)	100.00	Average number of daily allowances per participant	3
Average Long-Distance Costs (EUR)	320.00		
Average reimbursement (per participant) (EUR)	620.00		
Total Travel, Accommodation and Subsistence Costs (EUR)	23,560.00		
Total unique participants to be accounted for LOS grant	30	Local Organiser Support (EUR)	3,000.00
Total cost of the meeting (EUR)	26,560.00		

Outreach talk ?

Training School

Lorenzo Ubaldi will form an organizing committee involving the WG Leaders

Overview

Title of the Training School	Dates	Location	ITC	Total Cost (EUR)
2nd CA21106 COSMIC WISPErs Training School	10/06/2024 - 13/06/2024	Ljubljana (Slovenia)	Yes	32,225.00
			Total	32,225.00

Details

Title of the Training School	2nd CA21106 COSMIC WISPErs Training School		
Grant Period Goal(s) it will address	To train PhD students and young post-docs on specific topics of each WG, building on the common background acquired in the 1st Training School, To keep the contributions of Young Researchers and Innovators from ITC, to improve the gender balance and enhancing diversity in the Action		
Description	The Training School will highlight to young researchers but also to others interested in the topic, the challenges of WISPErs physics and will discuss the latest developments in the field. The theoretical background, observational motivation, and experimental avenues to observe WISPErs signatures in the laboratory will be covered. Lectures will be complemented with exercise sessions and students sessions in which they will present the results of their research. Financial support will be provided to PhD students, with priority to improve gender balance and for students from ITC countries. Lecturers will also be reimbursed. Established researchers with own travel funds can join the Training School without reimbursement by the Action. The daily allowance will be fixed in relation to the typical local costs.		
Output(s)	Slides of the lectures will be available on the Action website. Lectures notes will be published on electronic version.		
Location	Ljubljana (Slovenia)	ITC	Yes
Start Date	2024-06-10 09:00:00	End Date	2024-06-13 18:00:00
Duration	4 days	Attendance Type	Face to face
Participant information	Trainers	Trainees	
• Daily allowance (EUR)	155.00	120.00	
• Average number of daily allowances per participant	5	5	
• Average Long-Distance Costs (EUR)	250.00		
• Average reimbursement (EUR)	1,025.00	850.00	
• Total number of expected trainers/trainees	9	30	
• Trainers/trainees expected to be reimbursed from COST funds	9	20	
Total Travel, Accommodation and Subsistence Costs (EUR)	26,225.00		
Total unique participants to be accounted for LOS grant	30		
Local Organiser Support (EUR)	6,000.00		
Total cost of the Training School (EUR)	32,225.00		

Grants

Mobility of Researchers and Innovators

Grant Period Goal(s) it will address:	To keep the contributions of Young Researchers and Innovators from ITC, to improve the gender balance and enhancing diversity in the Action	
Description:	The mobility of Researchers and Innovators will be awarded via a call	
Budget (EUR)	Short Term Scientific Missions (STSM) grants	13,000.00
	This budget would allow for approx. 7 STSM grants (based on the average costs per STSM grant spent by all Actions).	
	Virtual Mobility grants	0.00
	This budget would allow for approx. 0 Virtual Mobility grants (based on the average costs per VM grant spent by all Actions).	
	Total	13,000.00

Presentations at Conferences organised by Third Parties

Description:	Those grants are aimed to even further publicise the work of the Action and of individuals participating in the Action. Targeted conferences are the "Patras workshop", a renowned conference on WISP physics, and the TAUP (Topics in Astroparticle and Underground Physics) Conference, a highly-attended general conference discussing WISPs physics.	
Budget (EUR)	ITC Conference grants	2,000.00
	This budget would allow for approx. 2 ITC Conference grants (based on the average costs per ITC Conference grant spent by all Actions).	
	Dissemination Conference grants	1,000.00
	This budget would allow for approx. 1 Dissemination Conference grants (based on the average costs per DC grant spent by all Actions).	
	Total	3,000.00

New rounds expected next year