

CA18108: Quantum gravity phenomenology in the multi-messenger approach (QG-MM)

CSO approval: **13/11/2018**
Start Date: **14/03/2019**
End Date: **13/03/2023** (4 years)

Parties: **27**
Action Chair: **Prof. José Manuel Carmona** (University of Zaragoza, Spain)
Action Vice Chair: **Prof. Giovanni Amelino-Camelia** (University of Naples, Italy)
Science officer: **Dr. Ralph Stübner**
Admin. officer: **Ms. Rose Cruz Santos**

<https://www.cost.eu/actions/CA18108>



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of the European Union



CA18108: Quantum gravity phenomenology in the multi-messenger approach (QG-MM)

- **Main Aim:**

*Investigate **possible signatures** predicted by **quantum gravity models** in the **observation of different cosmic messengers**, by creating the conditions for a **close collaboration** between **theorists** and the **various experimental communities** involved in the detection of such cosmic messengers*

Keywords:

Lorentz invariance violation and deformation
gamma-ray astronomy
cosmic neutrinos
ultra-high-energy cosmic rays
gravitational waves

Key point to address the challenge:

Join different communities

CA18108 Network

27 COST Members

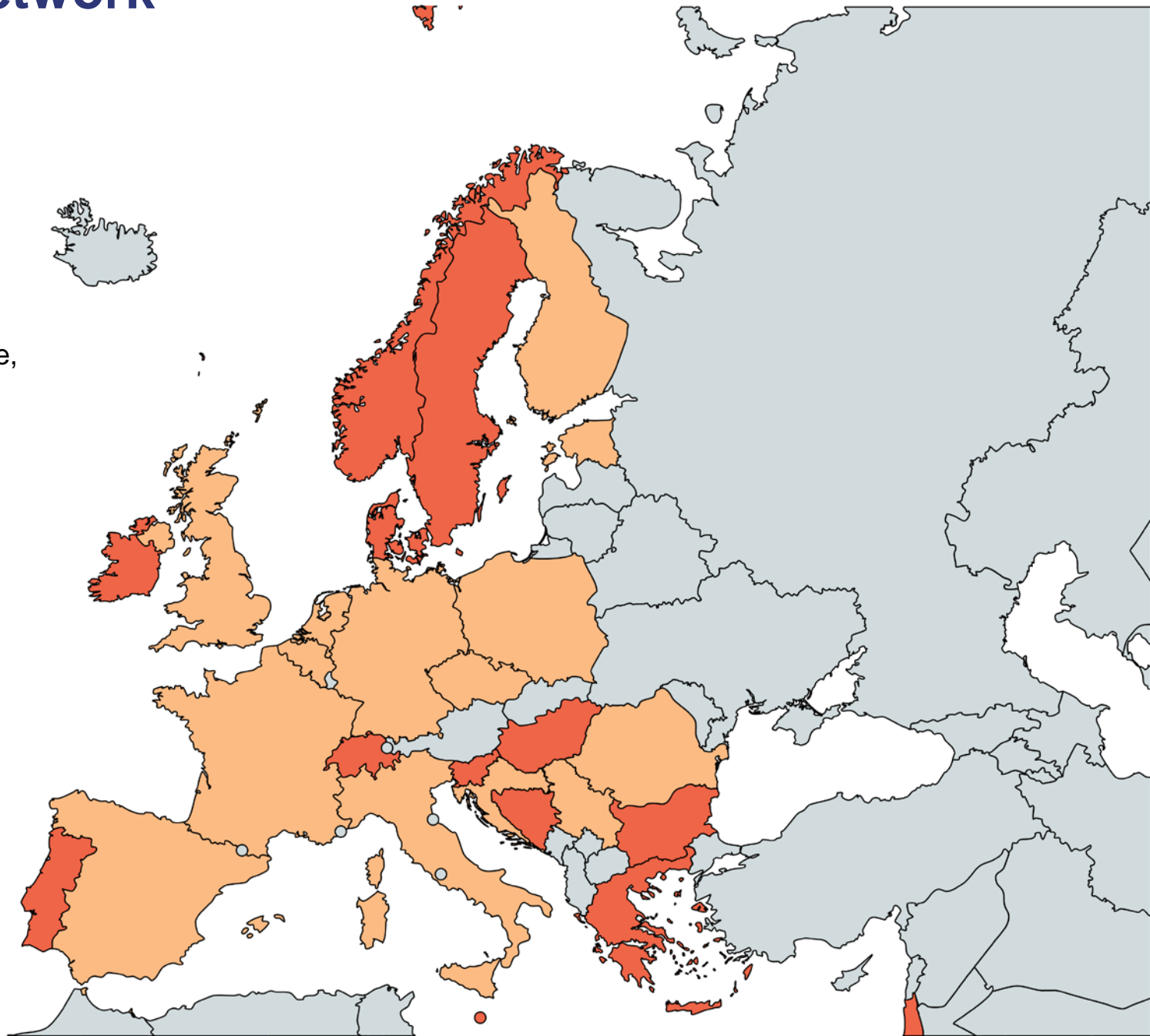
14 proposers

13 new countries

13 Inclusiveness
Target Countries (ITC)

7 COST International
Partners (Canada, Chile,
China, Japan, Kuwait,
Iran, USA)

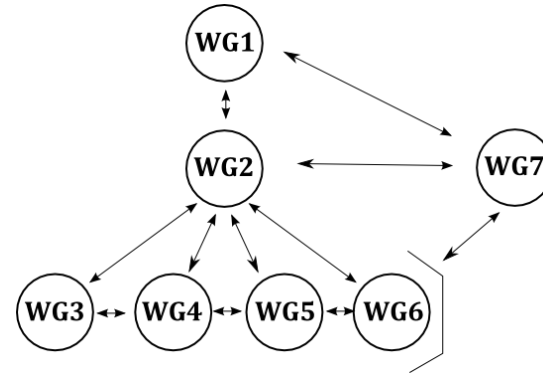
200 Action participants



CA18108 Coordination

Working Groups:

- WG1: Theoretical frameworks for gravity effects below the Planck energy
- WG2: Phenomenology of QG
- WG3: Gamma rays
- WG4: Neutrinos
- WG5: Cosmic rays
- WG6: Gravitational waves



Committees:

- Advisory committee for Training Schools and Annual Conferences
- Committee for outreach and gender activities
- Committee for the evaluation of STSM
- Committee for the evaluation of ITC Conference Grants

You are welcome to join!

CA18108 Coordination

Working Groups:

• WG1:

• WG2:

• WG3:

• WG4:

• WG5:

• WG6:

• Committe

• Advise

• Comm

• Comm

• Comm

Core Group			
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Spain	Grant Holder Sc Rep	Manel Martinez	martinez@ifae.es

CA18108 Tools

Logo



CA18108 Tools

Shared Drive

Google Drive interface showing a shared folder for COST CA18108. The folder contains several files and folders, including a PDF document titled "v2019-09-30 (typo fixes).pdf" and a folder named "Action logos.pdf". The interface also displays a sidebar with navigation options and a search bar.

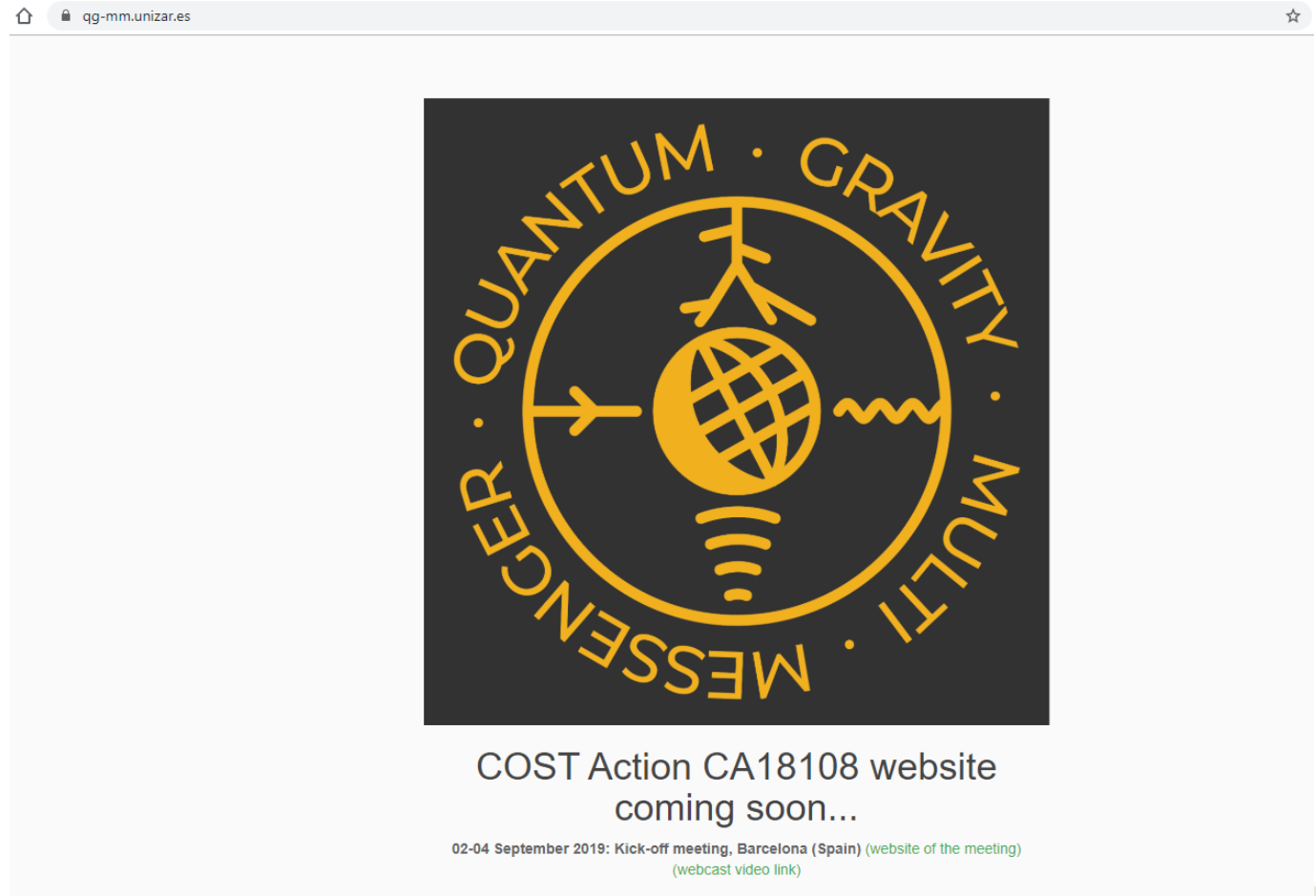
Nombre	Última modificación	Tamaño de archivo
Folder: Action logo	19 jul. 2019 yo	-
Folder: Database of published papers	22 jul. 2019 yo	-
Folder: WG1	10 jul. 2019 yo	-
Folder: WG2	10 jul. 2019 yo	-
Folder: WG3	10 jul. 2019 yo	-
Folder: WG4	10 jul. 2019 yo	-
Folder: WG5	10 jul. 2019 yo	-
Folder: WG6	10 jul. 2019 yo	-
Folder: COST Vademecum	23 sept. 2019 Armando di Matteo	-

Send us your Gmail e-mail address to add you

CA18108 Tools

Website
(coming soon)

<https://qg-mm.unizar.es>



CA18108 Tools

Social media

twitter.com/cost_qgmm

facebook

Correo electrónico o teléfono Contraseña

¿Has olvidado los datos de la cuenta?

Quantum Gravity Phenomenology in the Multi-Messenger approach
@COSTQGMM

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Publicaciones

Quantum Gravity Phenomenology in the Multi-Messenger approach
Ayer a las 4:32 ·

Outreach talk next week in Barcelona by Astrid Eichhorn on "Black holes and the deep quantum structure of space and time" (simultaneous translation to Spanish and Catalan). Brought to you by CosmoCaixa COST - European Cooperation in Science and Technology #QGMM_BCN2019. Don't miss it!

Charla de divulgación la semana que viene en Barcelona por Astrid Eichhorn sobre "agujeros negros y la estructura cuántica profunda del espacio y el tiempo" (traducción simultánea al español y catalán).

Me gusta

Enviar mensaje

Sitio web de ciencias

Comunidad

43 personas les gusta esto

46 personas siguen esto

Información

Sitio web de ciencias

Transparencia de la página

facebook.com/COSTQGMM

COST CA18108: QG-MM (@COST_QGMM)

Inicio Momentos

Quantum Gravity Phenomenology in the Multi-Messenger approach

Tweets 6 Siguiendo 17 Seguidores 17 Me gusta 17

Tweets Tweets y respuestas Multimedia

COST CA18108: QG-MM @COST_QGMM

#COSTAction Quantum gravity phenomenology in the multi-messenger approach @COSTprogramme

Se unió en marzo de 2019

Fotos y videos

COST CA18108: QG-MM @COST_QGMM · 29 sept.

Outreach talk next week in Barcelona by @AstridEichhorn on "Black holes and the deep quantum structure of space and time" (simultaneous translation to Spanish and Catalan). Don't miss it! cosmoaixa.es/es/p/los-aguje... Brought to you by @CosmoCaixa @COSTprogramme #QGMM_BCN2019

¿Quieres aprovechar funciones nuevas? Es fácil: inicia sesión o regístrate.

Tendencias: Global

- #GotTalentGala3 5.387 Tweets
- #LaVozKids5 3.208 Tweets
- Almeida "Madrid 360": el nuevo plan

CA18108 Activities

Network Tools:

- *Workshops, conferences and WG meetings*
- *Training Schools*
- *Outreach and gender balance activities*
- *Short Term Scientific Missions*
- *ITC Conference Grants for early career investigators and PhD students*

Administrative kick-off of the Action: **Brussels, 14th March 2019**



CA18108 Activities

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Activities have already started:

- 13/08/19: Call for **next year events** (deadline: 22nd September 2019)
- 12/09/19: First call for applications for **ITC Conference Grants** (deadline: 3rd November 2019)
- (coming soon): First call for **STSM**

Please remember:

- Thank **COST CA18108** support in your scientific papers

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Scientific kick-off of the Action: **Barcelona, 2-4 October 2019**



Kick-off Meeting
COST Action
CA18108: QG-MM
(Quantum Gravity
phenomenology in
the Multi-
Messenger
approach)

2-4 octubre 2019
Casa de Convalescència
Europe/Madrid timezone

Local Organizing Committee

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Topic: “What you would like other participants to know about your research?”

- (1-hour) Review talks for each WG on Wednesday
- Short talks on specific topics/experiments on Thursday
- Outreach talk at CosmoCaixa on Wednesday, 19 h: Astrid Eichhorn, “Black holes and the deep quantum structure of space and time”
- Workshop dinner on Thursday evening

Friday:

- WG meetings in the morning (WG1-2 and WG3-6 in rooms A01 and A02)
- MC meeting in the afternoon (room A01)

Do not forget:

- To sign the attendance list every day
- If you received an invitation, ask for your reimbursement within one month

Enjoy!