



**ARENA 2022**  
**9<sup>th</sup> International Workshop on**  
**Acoustic and Radio EeV Neutrino Detection Activities**  
**Tuesday June 7<sup>th</sup> - Friday June 10<sup>th</sup>, 2022**  
**IGFAE & USC, Santiago de Compostela, Spain**

**First Bulletin: February 20<sup>th</sup> 2022**

**1) General Information:**

The ARENA workshop series is dedicated to acoustic and radio detection methods and their application to the observation of neutrinos and cosmic rays at ultra-high energies.

The **ARENA 2022** workshop will be an **in-person conference** held in Hotel NH Collection Santiago de Compostela ([link](#)) in **Santiago de Compostela, Spain, from Tuesday June 7, 9:00 until Friday June 10, 14:00.**

*This event will be held in lieu of the ARENA 2020 that had to be cancelled due to the COVID-19 pandemic.*

The venue is a privileged location in Santiago de Compostela, near North Campus of University of Santiago de Compostela, and less than 5 min. walking distance to the Cathedral and the historic old town of Santiago.



## 2) Committees:

### International Advisory Board:

J. Alvarez-Muñiz, Santiago de Compostela, Spain  
N. Budnev, Irkutsk, Russia  
A. Capone, Roma, Italy  
A. Connolly, Columbus, Ohio, USA  
S. Danaher, Northumbria, UK  
J. Hörandel, Nijmegen, The Netherlands  
T. Huege, Karlsruhe, Germany  
A. Nelles, Zeuthen, Germany  
A. Karle, Madison, USA  
R. Lahmann, Erlangen, Germany (Chair)  
P. Lautridou, Nantes, France  
S. Yoshida, Chiba, Japan  
S. Wissel, University Park, Pennsylvania, USA

### Local organizing committee:

J. Alvarez-Muñiz, IGFAE & USC (chair)  
J. Ammerman-Yebra, IGFAE & USC  
L. Cazón, IGFAE & USC  
M.A. Martins, IGFAE & USC  
G. Parente, IGFAE & USC  
E. Zas, IGFAE & USC

IGFAE = Instituto Galego de Física de Altas Enerxias (<https://igfae.usc.es>)

USC = Universidade de Santiago de Compostela (<https://www.usc.gal/en>)

## 3) Scientific Program and Abstract Submission

All oral presentations will be organized in plenary sessions. Abstract submissions are invited through the workshop webpage with the deadlines given below. A poster session may be organized depending on requests for poster presentations and depending on whether the available time slots are sufficient to accommodate all accepted presentations.

The workshop covers the following topics, comprising theory, simulation, and existing and future experiments:

- Radio-detection of Ultra-high-energy (UHE) neutrinos and cosmic rays
- Acoustic detection of UHE neutrinos
- Experimental techniques of acoustic and radio detection
- Radio-emission from particle showers in dense media/air (theory & simulation)
- Other detection technologies (microwave, radar, ultrafast magnetic sensing...)
- Interdisciplinary relations: radio and acoustic techniques used in other fields of science

#### 4) Registration and Important Dates

Registration will be opened on March 1, 2022 via the workshop indico webpage:

<https://indico.cern.ch/event/826366/>

Both registration and abstract submission are handled by the CERN Indico system so that participants will need a CERN lightweight account to register: <https://account.cern.ch/account/>.

***The conference fee is 425€ (standard) and 375€ (student) for early registration and 475€ (standard) / 425€ (student) for late registration.*** In order to be eligible for the early registration fee, both the registration and the payment have to be completed before the deadline.

Registration fees include: proceedings (electronic), coffee breaks, lunches, social activities and dinner banquet.

Registration opening:	March 1, 2022
Deadline for early registration:	March 31, 2022
Deadline for normal registration:	May 15, 2022

#### 5) Abstract Submission and Proceedings

Abstracts will be submitted through the workshop website and refereed by a peer-to-peer committee.

Deadline for abstract submission:	May 15, 2022
Latest date of notification about abstract approval:	May 31, 2022
Deadline for Proceedings Submission:	October 31, 2022

#### 6) Social Program

Leisure activities and banquet are programmed. Tentative dates Wednesday 8 June or Thursday 9 June. Accompanying persons are welcome to join the leisure activities and banquet at a total cost of **125€** (for participants, these activities are included in the fee).

#### 7) Accommodation and Practical Information

There are plenty of hotels in Santiago de Compostela both in the old town and new town in a wide range of prizes. A non-comprehensive list of suggested hotels will be available in the indico web page.

***Please make your own arrangements for the accommodation of your choice.***

Information on travel and transportation from/to Santiago airport can be also found in the conference web page.

#### **8) Contact**

For further details, please consult the webpage of the event

For specific questions or comments please do not hesitate to contact us via e-mail:

**[arena.2022.santiago@gmail.com](mailto:arena.2022.santiago@gmail.com)**