

Session Program

12-15 Jun 2018



ARENA 2018 - Acoustic and Radio EeV Neutrino Detection Activities

Analysis tools

Wednesday 13 June

14:30

Analysis tools: Radio detection 1

Session | **Location:** Laboratori Nazionali del Sud - INFN Via Santa Sofia 62, I-95123 Catania, Italy | **Convener:** ALBRECHT KARLE

14:30–14:50

An analytic description of the radio emission of air showers based on its emission mechanisms

Speaker

Christian Glaser

14:50–15:10

Using FDTD simulations to study radio propagation effects

Speaker

Stijn Buitink

15:10–15:30

RadioPropa: A Modular Raytracer for In-Matter Radio Propagation

Speaker

Tobias Winchen

15:30–15:50

A semi-analytic code for the calculation of the radio footprint from an arbitrary shower LDF, MGMR3D

Speaker

Olaf Scholten

15:50–16:10

Towards online triggering for the radio detection of air showers using deep neural networks

Speaker

Florian Führer

16:10–16:30

Modeling the Acoustic Field generated by a Pulsed-Beam for Experimental Proton Range Verification

Speaker

Elia Arturo Vallicelli

16:30

17:00

Analysis tools: Radio detection 2

Session | **Location:** Laboratori Nazionali del Sud - INFN Via Santa Sofia 62, I-95123 Catania, Italy | **Convener:** Stephanie Wissel

17:00–17:20

Radio universality and template-based pulse synthesis

Speaker

David Butler

17:20–17:40

Reconstruction of air-shower measurements with AERA in the presence of pulsed radio-frequency interference

Speaker

Tim Huege

17:40–18:00

Systematic uncertainty of first-principle calculations of the radiation energy emitted by extensive air showers**Speaker**

Marvin Gottowik

18:00–18:20

A Rotationally Symmetric Lateral Distribution Function for Radio Emission from Inclined Air Showers**Speaker**

Tim Huege

18:20–18:40

Determining atmospheric electric fields from the cosmic-ray radio footprint**Speaker**

Olaf Scholten

18:40–19:00

A new LDF parametrization for the air shower radio footprint applied to LOFAR data**Speaker**

Jörg Hörandel

19:00–19:20

Atmospheric Effects On The Radio Signal of Extensive Air Showers**Speaker**

pragati mitra

19:20

Friday 15 June

09:00

Analysis tools: Radio detection 3

Session | **Location:** Laboratori Nazionali del Sud - INFN Via Santa Sofia 62, I-95123 Catania, Italy | **Convener:** Prof. Abigail Viereg

09:20

09:00–09:20

Radio morphing: towards a full parameterization of the radio signal from air-showers

Speaker

Anne Zilles