

# Astroparticle Physics PhD Defenses



## Report of Contributions

Contribution ID: 1

Type: **not specified**

# Unveiling the Nature of Dark Matter with Direct Detection Experiments

*Thursday, 10 September 2020 10:00 (1 hour)*

**Presenter:** ZEMA, Vanessa (GSSI and Chalmers University of Technology)

Contribution ID: 2

Type: **not specified**

## Discussion

*Thursday, 10 September 2020 11:00 (1 hour)*

Defense Committee:

Ivan De Mitri (GSSI - L'Aquila), Chair

Elisabetta Baracchini (GSSI - L'Aquila)

Nicolao Fornengo (Università di Torino)

Ulf Gran (Chalmers University of Technology, Sweden)

Andreas Heinz (Chalmers University of Technology, Sweden)

Substitutes: Pasquale Blasi (GSSI - L'Aquila), Natalia Di Marco (GSSI)

External Reviewers:

Nicolao Fornengo (Università di Torino)

Piero Ullio (SISSA - Trieste)

Advisors:

Karoline Schaeffner (Max Planck Institute for Physics, Munich, Germany and GSSI)

Riccardo Catena (Chalmers University of Technology, Sweden)

Contribution ID: 3

Type: **not specified**

## **Exploring the Inelastic Dark Matter frontier with the CRESST experiment**

**Presenter:** OLMI, Miriam (GSSI)

Contribution ID: 4

Type: **not specified**

## Discussion

Defense Committee:

Cristiano Galbiati (GSSI - L'Aquila), Chair

Elisabetta Baracchini (GSSI - L'Aquila)

Alfredo Ferella (Università dell'Aquila)

Antonella Incicchitti (INFN - Roma)

Marco Selvi (INFN - Bologna)

Substitutes: Ivan De Mitri (GSSI - L'Aquila), Francesco Salamida (Università dell'Aquila)

External Reviewers:

Fabio Bellini (INFN - Roma)

Frank Avignone (University of South Carolina, USA)

Eric Norman (University of California, Berkely, USA)

Advisor: Paolo Gorla (INFN - LNGS)

Co-advisor: Federica Petricca (Max Planck Institute for Physics, Munich, Germany)

Contribution ID: 5

Type: **not specified**

## **First simultaneous measurement of low-energy pp-chain solar neutrinos and prospects for CNO neutrino detection in Borexino**

**Presenter:** GUFFANTI, Daniele (GSSI)

Contribution ID: 6

Type: **not specified**

## Discussion

Defense Committee:

Ivan De Mitri (GSSI-L'Aquila), Andrea De Simone (SISSA-Trieste), Fernando Ferroni (GSSI-L'Aquila),  
Francesco Fidecaro (Univ. Pisa), Francesco Vissani (GSSI-L'Aquila)

Substitutes: Elisabetta Baracchini (GSSI-L'Aquila), Pasquale Blasi (GSSI-L'Aquila), Giulia Pagliaroli  
(GSSI-L'Aquila)

External Reviewers:

Carlos Peña Garay (Canfranc Laboratory, Spain),  
Riccardo Brugnera (Università di Padova)

Advisors: Matteo Agostini (Technical University Munchen, Germany), Nicola Rossi (INFN LNGS)

Contribution ID: 7

Type: **not specified**

## **Theoretical calculation of nuclear reactions of interest for Big Bang Nucleosynthesis**

**Presenter:** GNECH, Alex (GSSI)



Contribution ID: 8

Type: **not specified**

## Discussion

Defense Committee:

Ivan De Mitri (GSSI-L'Aquila), Chair

Giulia Pagliaroli (GSSI-L'Aquila)

Sergio Petrerá (GSSI-L'Aquila)

Massimo Mannarelli (INFN-LNGS)

Sergio Cristallo (INAF - Osservatorio d'Abruzzo)

Substitutes: Pasquale Blasi (GSSI-L'Aquila), Marica Branchesi (GSSI-L'Aquila)

External Reviewers:

Sonia Bacca (Gutenberg Universitat, Mainz, Germany)

Christian Forssén (Chalmers University of Technology, Gothenburg, Sweden)

Nunzio Itaco (Università della Campania "L. Vanvitelli", Caserta)

Advisor: Laura Marcucci (Università di Pisa)

Co-advisor: Michele Viviani (INFN Pisa)

Contribution ID: 9

Type: **not specified**

## Open problems in neutrino astrophysics

**Presenter:** MASCARETTI, Carlo (GSSI)

Contribution ID: **10**

Type: **not specified**

## Discussion

Defense Committee:

Ivan De Mitri (GSSI-L'Aquila), Chair

Giulia Pagliaroli (GSSI-L'Aquila)

Sergio Petrerá (GSSI-L'Aquila)

Massimo Mannarelli (INFN-LNGS)

Sergio Cristallo (INAF - Osservatorio d'Abruzzo)

Substitutes: Pasquale Blasi (GSSI-L'Aquila), Marica Branchesi (GSSI-L'Aquila)

External Reviewers:

Markus Ahlers (Niels Bohr Institute, Copenhagen, Denmark)

Paolo Lipari (INFN Roma)

Maurizio Spurio (Università di Bologna)

Advisor: Francesco Vissani (GSSI-L'Aquila)