

# Astroparticle Physics PhD Defenses



## Report of Contributions

Contribution ID: 1

Type: **not specified**

# Searching for Core-Collapse Supernovae in the Multimessenger Era: Low Energy Neutrinos and Gravitational Waves

*Thursday, 23 April 2020 09:00 (1 hour)*

**Presenter:** HALIM, Odysse (GSSI)

Contribution ID: 2

Type: **not specified**

## Discussion

*Thursday, 23 April 2020 10:00 (1 hour)*

Defense Committee:

Roberto Aloisio (GSSI-L'Aquila), Chair

Elisabetta Baracchini (GSSI-L'Aquila)

Natalia Di Marco (GSSI-L'Aquila)

Walter Fulgione (INFN-LNGS, INAF-OATO)

Fausto Guarino (Università di Napoli "Federico II")

Substitutes: Francesco Vissani (GSSI-L'Aquila), Jan Harms (GSSI-L'Aquila)

External Reviewers:

Kate Scholberg (Duke University, North Carolina, USA)

Irene Tamborra (Niels Bohr Institute, Copenhagen, Denmark)

Michele Zanolin (Embry-Riddle University, Prescott, Arizona, USA)

Advisor: Viviana Fafone (Università di Roma "Tor Vergata")

Co-advisor: Giulia Pagliaroli (GSSI-L'Aquila)

Contribution ID: 3

Type: **not specified**

## **Measurement of cosmic ray proton+helium flux with the DAMPE experiment**

*Thursday, 23 April 2020 11:00 (1 hour)*

**Presenter:** WANG, Zhaomin (GSSI)

Contribution ID: 4

Type: **not specified**

## Discussion

*Thursday, 23 April 2020 12:00 (1 hour)*

### Defense Committee:

Roberto Aloisio (GSSI-L'Aquila), Chair

Elisabetta Baracchini (GSSI-L'Aquila)

Natalia Di Marco (GSSI-L'Aquila)

Walter Fulgione (INFN-LNGS, INAF-OATO)

Fausto Guarino (Università di Napoli "Federico II")

Substitutes: Francesco Vissani (GSSI-L'Aquila), Jan Harms (GSSI-L'Aquila)

### External Reviewers:

Fausto Guarino (Università di Napoli "Federico II")

Miguel Mostafa (Center for Particle Astrophysics, Pennsylvania State University, USA)

Shuang-Nan Zhang (Institute of High Energy Physics, Chinese Academy of Sciences, Beijing, China)

Advisor: Ivan De Mitri (GSSI-L'Aquila)

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**

*Thursday, 23 April 2020 14:00 (1 hour)*

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



Contribution ID: 8

Type: **not specified**

## Discussion

*Thursday, 23 April 2020 15:00 (1 hour)*

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

*Thursday, 23 April 2020 16:00 (1 hour)*

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

Contribution ID: **10**

Type: **not specified**

## Discussion

*Thursday, 23 April 2020 17:00 (1 hour)*

### 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)