

International Conference  
**Dark Matter, Hadron Physics and Fusion Physics**

*Capo Peloro Resort* Hotel - Messina (Italy)  
September 24-26, 2014

**Program**

Tuesday, September 23

17:30 – 21:30 **Registration** (Hotel Hall)

20:00 – 22:00 **Welcome Reception** (*Cariddi* Restaurant)

Wednesday, September 24

8:50 (10') **Welcome**

9:00 – 10:40 **Nuclear, Heavy Ion I**

9:00 (25'+5') G. Giardina *Influence of the structure and energy of reactants on the fusion process and related reaction products*

9:30 (25'+5') E. Kozulin *Fusion-fission and quasi-fission of superheavy systems with  $Z=110-116$  formed in the 48-Ca induced reactions*

10:00 (17'+3') L. Torrì *D-D nuclear fusion processes induced in polyethylene by TW laser-generated plasma*

10:20 (17'+3') S. Almaraz-Calderon *C+C Fusion*

10:40-11:00 **Coffee break**

11:00 – 12:00 **Nuclear, Heavy Ion II**

11:00 (25'+5'") F. Volpe *Cross-fertilization of magnetic confinement fusion research, nuclear and sub-nuclear physics and accelerator science*

11:30 (25'+5') A. Badalà *Hadronic resonances in ALICE*

12:00 – 12:30 **Dark Matter I**

12:00 (25'+5') N. Toro *New Forces and Dark Matter*

13:00-14:30 **Lunch break**

14:30 – 15:50 **Dark Matter I**

14:30 (25'+5') M. Schumann *DM direct search: an overview*

15:00 (25'+5') P. Schuster *Experimental Program to Search for GeV-Scale Dark Forces and Dark Matter*

15:30 (17'+3') S. Giagu *LLP search at hadron colliders*

15:50 – 16:20 **Miscellaneous**

15:50 (25'+5') G. Consolati *Experiments with low-energy antimatter*

16:20-16:40 **Coffee Break**

16:40 – 18:00 **Miscellaneous**

16:40 (25'+5') P. Müller *Searching for "New Physics" with laser trapped atoms*

17:10 (17'+3') L. Zana *Neutron skin measurement with pion photoproduction at the MAMI electron beam facility*

17:30 (25'+5') P. Singh *Projectile - Mass asym. systematics for low energy incomplete fusion. Dependence of low energy incomplete fusion on projectile's  $\alpha$ -Q-value*

Thursday, September 25

9:00 – 10:40 **Dark Matter II**

- 9:00 (17'+3') M. Raggi *The PADME experiment at LNF*  
9:20 (17'+3') H. Merkel *Search for heavy photon at Mainz*  
9:40 (17'+3') J. Beacham *APEX: The APrime EXperiment at Jlab*  
10:00 (17'+3') M. De Napoli *The HPS experiment at JLab*  
10:20 (17'+3') E. Goudzovski *Search for the dark photon in neutral pion decays by the NA48/2 experiment*

10:40-11.10 Coffee Break

11:10 – 12:30 **Dark Matter III**

- 11:10 (17'+3') J. Pradler *Astrophysical probes and rare-event limits on dark photons*  
11:30 (17'+3') F. Curciarello *Search for dark forces at DAFNE*  
11:50 (17'+3') A. Celentano *The BDX experiment*  
12:10 (17'+3') G. Krnjaic *Dark matter search with accelerators and radioactive sources at LNGS*

13:00-14.30 Lunch Break

14:30 – 16:10 **Hadron Spectroscopy I**

- 14:30 (25'+5') A. Szczepaniak *Hadron spectroscopy: today and tomorrow*  
15:00 (25'+5') F. Krinner *Highlights from COMPASS in hadron spectroscopy*  
15:30 (17'+3') A. Filippi *The meson spectroscopy program at JLAB*  
15:50 (17'+3') A. D'Angelo *The baryon spectroscopy program at JLAB*  
16:10 (17'+3') V. Bellini *HCAL-J: an Hadron Calorimeter for Hall A SuperBigBite Spectrometer at JLAB*

16:30-16:50 Coffee Break

16:50 – 18:45 **Hadron Spectroscopy II**

- 16:50 (25'+5') J. Pelaez *An overview of light scalar mesons*  
17:20 (17'+3') V. Mathieu *Phenomenology of light hadrons*  
17:40 (20'+5') S. Eidelman *Light mesons at LHCb*  
18:05 (17'+3') X. Ji *Light mesons at BESIII*  
18:25 (17'+3') B. Shwartz *Studies of light mesons at Belle*

20:00-22:00 Conference Dinner

Friday, September 26

9:00 – 11:00 **Hadron Spectroscopy III**

- 9:00 (25'+5') M. Karliner *Theory of exotic quarkonia*  
9:30 (25'+5') E. Santopinto *Quark models in hadron spectroscopy*  
10:00 (17'+3') A. Guo *Exotic Charmonia at BESIII*  
10:20 (17'+3') J. Ferretti *The spectrum of bottomonium*  
10:40 (17'+3') A. Garmash *Bottomonium studies at Belle*

11:00-11:20 Coffee Break

11:20 – 13:20 **Hadron Spectroscopy IV**

- 11:20 (25'+5') R. Cardinale *Heavy mesons at LHCb*  
11:50 (17'+3') A. Tiberio *Recent results from the LHCf experiment*  
12:10 (25'+5') I. Logashenko *Measurement of hadronic cross sections in Novosibirsk*  
12:40 (17'+3') V. De Leo *Measurement of the hadronic cross section at KLOE/KLOE2*  
13:00 (17'+3') A. Di Cicco *Status of the KLOE-2 experiment*

13:20-14:40 Lunch Break

14:40 – 16:30 **Anomalous Phenomena**

- 14:40 (25'+5') A. Anastasi *The Fermilab muon  $g-2$  experiment*  
15:10 (25'+5') G. Piacentino *Status of  $\mu 2e$  and other LFV experiments (TBC)*  
15:40 (25'+5') M. Hoferichter *Hadronic light-by-light in muon  $g-2$*   
16:10 (17'+3') G. Venanzoni *Measurement of  $a_{\mu}^{had}$  in spacelike region*

16:30-16:50 Coffee Break

16:50 – 18:10 **Baryon spectroscopy and apparatus**

- 16:50 (17'+3') V. Kashevarov *Experimental study of eta meson photoproduction reaction at MAMI*  
17:10 (17'+3') F. Mammoliti *Characterization of large GEM module for the tracker at JLAB Hall A*  
17:30 (17'+3') G. Mandaglio *Eta and eta' beam asymmetry measurements at GRAAL*  
17:50 (17'+3') I. Strakovsky *Radiative decay width of neutral non-strange baryons from PWA*

18:10 (10') **Concluding remarks**