FCCP2017

"International Workshop on Flavour changing and conserving processes"

Villa Orlandi, Anacapri – Capri Island, Italy

7 - 9 September 2017

BULLETIN

1. Place and Date.

The "International Workshop on Flavour changing and conserving processes" (FCCP2017), is organized by the Physics Department of the University of Naples "Federico II" and by INFN (Istituto Nazionale di Fisica Nucleare). It will take place in Anacapri, Capri Island, from Thursday, September 7 to Saturday, September 9, 2017. This is the second workshop of a series which aims to discuss the status and prospects of the physics of "Flavour changing and conserving processes". It addresses the scientific community involved in experiments like g-2, mu2e, meg, mee, COMET, EDM and more generally to the physics of K and B mesons.
2. Organizing Committee

G. D'Ambrosio (INFN, Naples)
M. Iacovacci (University of Naples)
M. Passera (INFN, Padova)
G. Venanzoni (INFN, Frascati)

3. Local Organizing Committee

G. D'Ambrosio (INFN, Naples)
G. Carlino (INFN, Naples)
M. Iacovacci (University of Naples)
S. Mastroianni (INFN, Naples)
M. Passera (INFN, Padova)
G. Venanzoni (INFN, Frascati)

4. Secretariat

**effe erre congressi srl**
Area Industria della Conoscenza
Via Diocleziano 107/A
80124 Napoli
Ph: + 39 081 2302417
Fax: + 39 081 2429572
[www.frcongressi.it](http://www.frcongressi.it)

5. Preliminary schedule of the workshop

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>08:00-09:00</td>
<td>Registration</td>
</tr>
<tr>
<td>09:00-09:05</td>
<td>Welcome</td>
</tr>
<tr>
<td>09:05-09:15</td>
<td>Introduction</td>
</tr>
<tr>
<td>09:15-09:40</td>
<td>General discussion on $g_2$</td>
</tr>
<tr>
<td>09:40-10:05</td>
<td>Status of the Muon $g_2$ experiment at Fermilab</td>
</tr>
<tr>
<td>10:05-10:30</td>
<td>Status of the Muong $g_2$/EDM experiment at J-Parc</td>
</tr>
<tr>
<td>10:30-10:55</td>
<td>QED contribution to the electron $g_2$</td>
</tr>
<tr>
<td>Time</td>
<td>Session</td>
</tr>
<tr>
<td>--------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>11:00-11:20</td>
<td>Coffee break</td>
</tr>
<tr>
<td>11:20-11:45</td>
<td>Hadronic leading order contribution to the muon g-2</td>
</tr>
<tr>
<td>11:45-12:10</td>
<td>Lattice progress on hadronic contributions to g-2 of the muon</td>
</tr>
<tr>
<td>12:10-12:35</td>
<td>Hadronic light-by-light contribution to the muon g-2 on the lattice (1)</td>
</tr>
<tr>
<td>12:35-13:00</td>
<td>Hadronic light-by-light scattering contribution to the muon g-2 on the lattice (2)</td>
</tr>
<tr>
<td>13:00-15:00</td>
<td>Lunch time</td>
</tr>
<tr>
<td>Afternoon session</td>
<td>Chairman:</td>
</tr>
<tr>
<td>15:00-15:25</td>
<td>Dispersion relations for hadronic light-by-light scattering</td>
</tr>
<tr>
<td>15:50-16:15</td>
<td>Review on gamma-gamma physics at KLOE</td>
</tr>
<tr>
<td>16:15-16:40</td>
<td>Status of Padme experiment and review on dark photon searches</td>
</tr>
<tr>
<td>16:40-17:00</td>
<td>Coffee break</td>
</tr>
<tr>
<td>17:00-17:25</td>
<td>The muon magnetic moment in the 2HDM and supersymmetric extensions</td>
</tr>
<tr>
<td>17:25-17:50</td>
<td>Muon pair production with hadronic vacuum polarization</td>
</tr>
<tr>
<td>17:50-18:15</td>
<td>Radiative corrections for a precision determination of the fine structure constant</td>
</tr>
<tr>
<td>18:15-18:40</td>
<td>Measurements of alpha and proposal for amu^HLO spacelike</td>
</tr>
<tr>
<td>20:00</td>
<td>Welcome party</td>
</tr>
<tr>
<td>Time</td>
<td>Event</td>
</tr>
<tr>
<td>------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>9:00 - 15:00</td>
<td><strong>Boat excursion around Capri Island</strong></td>
</tr>
<tr>
<td>15:05 - 15:30</td>
<td>Report from the Muon g-2 Theory Initiative at fermilab</td>
</tr>
<tr>
<td>15:30 - 15:55</td>
<td>Status of R measurements (SCAN)</td>
</tr>
<tr>
<td>15:55 - 16:20</td>
<td>ISR measurements of hadronic cross sections</td>
</tr>
<tr>
<td>16:20 - 16:45</td>
<td><strong>Muon electron scattering at NNLO</strong></td>
</tr>
<tr>
<td>16:45 - 17:10</td>
<td>Monte Carlo generators for muon electron scattering</td>
</tr>
<tr>
<td>17:10 - 17:30</td>
<td><strong>Coffee break</strong></td>
</tr>
<tr>
<td>17:30 - 17:55</td>
<td>B anomalies at LHCb</td>
</tr>
<tr>
<td>17:55 - 18:20</td>
<td>LHCb and Kaon physics: present status and perspectives</td>
</tr>
<tr>
<td>18:20 - 18:45</td>
<td>Standard Model and New physics for epsilon</td>
</tr>
<tr>
<td>18:45 - 19:10</td>
<td>Next-to-leading order prediction for the decay of mu to 3e nu nubar</td>
</tr>
<tr>
<td>21:00</td>
<td><strong>Social dinner</strong></td>
</tr>
</tbody>
</table>
Morning session | Chairman:
--- | ---
09:00 -09:25 | Lepton Flavor Universality in B Decays  
Ferruccio Feruglio
09:25 -09:50 | Status of Mu2e experiment  
Simona Giovannella
09:50 -10:15 | Status of Mu3e and MEG experiments  
Angela Papa
10:15 -10:40 | NA62 results on heavy leptons and K+ to pi+ nu nu  
Gianluca Lamanna
10:40 – 11:05 | Status of COMET experiment  
Phill Litchfield
11:05-11:20 | Coffee break
11:20 -11:45 | Charged lepton flavour violation: precise background calculation and effective field theoretical interpretation  
Marco Pruna
11:45-12:10 | Flavour Physics and extra dimensions  
Iyer Abhishek
12:10 -12:35 | Leptoquarks in Flavor Physics  
Dario Muller
12:35 -13:00 | The SHIP experiment and tau neutrino magnetic moment  
Giovanni De Lellis
13:00 -14:00 | Lunch break
14:00 -14:30 | Summary talk  
TBD

6. Social Events

- Thursday, September 7: Welcome cocktail at 20:00;
- Friday, September 8: Boat tour of the island (starting at 9:00)
- Friday, September 9: Social Dinner (21:00 h) at Restaurant “Materita’ Via Giuseppe Orlandi, 140, – Anacapri (http://www.ristorantematerita.it/)

7. Workshop Site

The Workshop will be held in Villa Orlandi, Anacapri, Capri Island. All information can be accessed online through the web page:

http://fccp2017.na.infn.it/
A valid passport is required for entry in Italy from outside of the European Schengen area. Participants from some countries will also need a visa. Please see http://www.esteri.it/visti/index_eng.asp for details.

8. Registration and Accommodation

People willing to participate should carefully fill in the Registration Form on the webpage of the workshop (http://fccp2017.na.infn.it/) not later than August 31, 2017. All participants are kindly requested to reserve their accommodation on their own.

9. Fee

The registration fee is 250 euros for participant and 80 euros for accompanying person. It includes proceedings, lunches, coffee breaks and social events. Accompanying people will have to pay 80 euros for social program, namely boat tour on Friday and social dinner.

For fee payment, please refer to http://www.frcongressi.net/pay/index.php?token=4c4ca945c0375ec05037b27b40941da8

For any questions on fee payment and Hotel reservation contact:

**effe erre congressi srl**
Dr.ssa Alessandra Saioni,
Area Industria della Conoscenza
Via Diocleziano 107/A
80124 Napoli
Ph: +39 081 2302417
Fax: +39 081 2429572
www.frcongressi.it

10. Travel and Information

You can get a fast boat to Capri from Naples' main port *Molo Beverello*. There are also some slower boats (car ferries) leaving from *Porta di Massa*, which is 500m from Molo Beverello (picture). Information about timetables can be found at the following link http://www.capri.net/salsa/lang/en/page/transport.html. Please note that the timetables usually change end of March.

**Arriving by plane:** From Napoli *Capodichino-Airport* it takes 45 min. to reach the Port of Naples. The company *Alibus* runs a bus that leaves in front of terminal 1 every 20 minutes (approximately at .00, .20, .40). The bus makes two stops, one at the central train station, the second at Piazza Municipio. The port (Molo Beverello) is at the bottom of the square.
The ride costs 3 euro and the ticket can be bought on the bus. Taxis are also available (ride to Molo Beverello about 25 euro, verify price BEFORE boarding the car!)

**Arriving by train:** Stazione Centrale (15 minutes from the Molo Beverello) is connected with the port by bus and tram.

**Anacapri** is one of the two main villages in the island of Capri (the other one is called "Capri", like the whole island). The hotels where we are staying are located in Anacapri. To reach them, you can choose one of these ways:

1. From Marina Grande (the port where the boat leaves you) take the direct bus to Anacapri (runs on average every hour; cost=1,80 Euro; it takes 15 min.; buy a ticket at the ticket-desk). Tell the driver the name of your hotel.
2. At Marina Grande (the port where the boat leaves you) buy at the ticket-desk a ticket for the "Funicolare"=cable-car to Capri village (runs every 15 min.; it takes 4 min.; then, from Capri take the bus to Anacapri (runs every 10 minutes; it takes 15 min.). You need a second ticket for this ride. Tell the driver the name of your hotel.
3. From Marina Grande (the port where the boat leaves you) take a taxi (it costs about 25 Euros; it takes 15 min.; verify the price before boarding the taxi).

**How to reach Villa Orlandi:** from the Piazza Vittoria bus stop in Anacapri, follow the suggested route to Villa Orlandi.

**Useful links:**

[www.capritourism.com](http://www.capritourism.com)
[www.capri.net](http://www.capri.net)

11. Proceedings

The Proceedings of the Workshop will be published on-line by the Open Access Journal “EPJ Web of Conferences” ([http://www.epj-conferences.org](http://www.epj-conferences.org)). All contributing authors will be asked to prepare a paper to be included in the proceedings and submit it within the deadline of **November 30, 2017**. More information can be found on the web page of the Workshop.

12. Internet Connection

A WiFi connection will be available for participants.

13. Contact
If you have any questions or comments, please send an e-mail message to the following address: loc_fccp2017@lists.na.infn.it

14. Important dates

Deadline of the registration:     August 31, 2017
Arrival:                         September 6, 2017
Beginning of the meeting:        September 7, 2017
End of the meeting:              September 9, 2017
Deadline for the proceedings:    November 30, 2017