

Workshop welcome

Introduction to GDR QCD: Michael Winn

25th November 2021
GDR QCD workshop

Organization:

Francesco Bossù (CEA-LSN), Emilie Maurice (LLR), Béatrice Ramstein (IJCLAB)

Groupement de recherche QCD

Structure to support scientific exchange and formation in QCD research in France

- Study of the strong interaction
- Interface to neighbouring fields of research
- Future opportunities

Groupement de recherche QCD

Coordination team: Carlos Muñoz Camacho, Cyrille Marquet and Michael Winn

Activities grouped in 5 working groups:

- 1) Single and multiple parton interactions
- 2) Collective effects with nucleon and nuclear collision & phase diagram of QCD
- 3) QCD at short distances: experiments, theory and tools
- 4) Future prospects of strong interaction physics and observables
- 5) QCD at low energy, non-perturbative methods

Please get into contact for proposals of workshops, schools or other events with the working group coordinators or directly with us: <https://gdrqcd.in2p3.fr/>

Your initiative is most welcome!

GdR QCD

WG4: Prospective observables in QCD

25th November 2021

Francesco Bossù (CEA-LSN), Emilie Maurice (LLR), Béatrice Ramstein (IJCLAB)

WG4 : Prospective observables in QCD

We want to :

- ❑ Focus on **probes** : dileptons, photons, jets, ...
- ❑ Explore the potential of the different experiments for measuring these probes
- ❑ Explore their scientific interest

WG4 is transversal to the GdR thematic WG

WG4 organization

1 workshop per year focusing on a specific probe

We can also help to **organize discussions about observables**: contact us if

For **theorist** :

- You would like to **propose new observables**
- Looking for experimentalist to **evaluate the feasibility of your measurement**

For **experimentalist** :

- You can measure an observable
- Looking for theoretists to **evaluate its scientific interest and make predictions**



Today :

What can we learn from dileptons measurements?

Experimentalists : Which experimental set-ups to measure dileptons ? What is the range and sensitivity of your dilepton measurements?

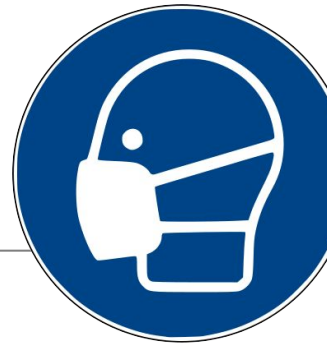
Theoreticians : What information to be extracted from existing dilepton measurements ? Which future measurements are needed?

Welcome	
<i>IJClab</i>	09:25 - 09:30
Studying QCD with the dilepton probe	<i>Samuel Wallon</i>
<i>IJClab</i>	09:30 - 10:10
Dilepton with CLAS	<i>Pierre Chatagnon</i>
<i>IJClab</i>	10:10 - 10:30
Perspectives EIC	<i>Daria Sokhan</i>
<i>IJClab</i>	10:30 - 10:50
Coffee break	
<i>IJClab</i>	10:50 - 11:10
TCS - theoretical point of view	<i>Jakub Wagner</i>
<i>IJClab</i>	11:10 - 11:30
UPC at the LHC	<i>Ms Aude Glaenger</i>
<i>IJClab</i>	11:30 - 11:50
Dilepton production in transport models	<i>Elena Bratkovskaya</i>
<i>IJClab</i>	11:50 - 12:10

Drell-Yan from theory to experiments	<i>François Arleo</i>
<i>IJClab</i>	13:40 - 14:00
Probing dense matter with the dielectron probe at HADES	<i>Tetiana Galatyuk</i>
<i>IJClab</i>	14:00 - 14:20
Dileptons with CMS	<i>Betoul Diab et al.</i>
<i>IJClab</i>	14:20 - 14:40
Dileptons with LHCb	<i>Manuel GUITTIERE</i>
<i>IJClab</i>	14:40 - 15:00
Coffee break	
<i>IJClab</i>	15:00 - 15:20
Intermediate mass dileptons as pre-equilibrium probes in HI collisions	<i>Maurice Coquet</i>
<i>IJClab</i>	15:20 - 15:40
Low mass dilepton with ALICE experiment, and NA60+ project	<i>Antonio Uras</i>
<i>IJClab</i>	15:40 - 16:00
High mass dilepton with ALICE	<i>Rita Sadek</i>
<i>IJClab</i>	16:00 - 16:20
Low mass dilepton with ALICE3	<i>Raphaelle Bailhache</i>
<i>IJClab</i>	16:20 - 16:40

Looking forward for fruitful discussions

Practicalities



- Coffee breaks will be served in the hall in front of the auditorium
- Lunch-trays will be provided for registrants, according to your meal selection, in the brandnew “conviviality” room in the corridor in front of the auditorium

Please take your tray and split for lunch in two groups

Group 1 : conviviality room max. number = max. {24,number of chairs}

Group 2 : cafeteria of building 100

- Wear the mask all the time
- Wash your hands often

