

Workshop on "Parton fragmentation: in the vacuum and in the medium"

ECT*, Trento

25th - 29th Jan. 2007

Organizers:

Francois Arleo (LAPTH)

David d'Enterria (CERN)

Topics of the workshop

- ❖ Parton (q,g,Q) **fragmentation** in the **QCD vacuum**:

EXP: e^+e^- (LEP,B-fact.,Cornell) e -p (JLab,HERA) p -p, \bar{p} (RHIC,Tevatron, LHC)

TH: global FFs fits, heavy-Q FFs, MLLA, di-hadron FFs, ...

- ❖ Parton (q,g,Q) **fragmentation** in the **QCD medium**:

EXP: e -A (JLab, HERA), Au-Au (RHIC), Pb-Pb (LHC)

TH: medium-mod. FFs, MLLA, “jet quenching”,

- ❖ **43 talks**: theoretical (18) & experimental (25) results.

- ❖ Data:

e^+e^- – ALEPH, BaBar, Belle, CLEO, DELPHI, OPAL

e -p, eA – CLAS, HERMES, H1, ZEUS

p -p, p -pbar – CDF, PHENIX, STAR

Au-Au, Pb-Pb – ALICE, ATLAS, CMS, PHENIX, STAR

Goals of the workshop

- ❖ Present **current & near-future theoretical-experimental state** of parton fragmentation studies.
- ❖ Identify **key (experimental,theoretical) physics** issues.
- ❖ **Share** knowledge / techniques / experiences between **vacuum – medium** & between **experiment – theory** communities.
- ❖ “Methodology”: **~30 mins. talks + 5-10 mins. questions**. Allocated times in agenda are “**indicative**”. No sharp time constraints. Discussions as long as needed.
- ❖ Discussion session (Tues. noon) on a possible “**FF accord**” for global-fits. (Other specific sessions can also be organized if needed).

“Technical” corner

- We want to post a “mini-proceedings” with all authors in arXiv.org. Each presenter asked to prepare 1-page-summary (“long abstract” with references) of his/her talk.
- Upload your talk and “long-abstract” in the agenda web page:
<http://indico.cern.ch/conferenceDisplay.py?confId=18684>
(click on 'manage' and enter 'trento' password)
- Meals:
Lunch at ECT* (bring your tickets)
Dinner at different local restaurants: reception tonight at ECT*, “La Baracca” (Tuesday), “Orso Grigio” banquet on Wednesday,
PLEASE SIGN FOR LUNCH EVERY DAY WHEN ARRIVING AT ECT*