Beijing08:
4th meeting of the WG
Radio Monte CarLow

H. Czyz/G. Venanzoni

Goals of the Workshop

- Exchange theoretical and experimental ideas. Discuss issues and perpectives

- Discuss the writeup of the report

Agenda

Thursday Oct 9

==========

- 14:30: Welcome (by Dr. Yifang.Wang,
  speaker of BES and deputy director of IHEP)
- 14:40: Introduction/Aim of the meeting (H.Czyz/G. Venanzoni)

  15:00 Session on “Luminosity”

- 15:00 J. Kuehn "Two-loop QED Hadronic Corrections to Bhabha Scattering"
- 15:30 T.Riemann "Status of the bhbhnnlo project"
- 16:00 J.Gluza "Virtual Hadronic and Heavy-Fermion ${\cal O}(\alpha^2)$ Corrections to Bhabha Scattering""
- 16:30 A.Arbuzov: "Systematic treatment of second order next-to-leading QED correction to Bhabha scattering"

Agenda

Friday Oct 10
==========

- 9.00 Session on R+ISR

- 9:00 S. Mueller "Status and prospects of ISR at KLOE"
  9:30 H.Czyz "The forthcoming PHOKHARA upgrades"

- 10:00 Tea break

- 10:30 Session on ”R+Tau"

- 10.30 G.Fedotovich "MCGPJ for the process $e^+e^- \to \pi^+\pi^-\pi^{0}$"
- 11:00 Z. Was "Status and perspectives of PHOTOS and TAUOLA projects
  with comments on KKMC and BHLUMI”
- 11.30 A. Sibidanov ?

- 12:00 -> 13:30 Lunch

- Friday Oct 10, afternoon:
- Discussion of the draft in subgroups

Agenda

- Saturday Oct 11
- ==========
- 9.30 Presentation of the draft from sub-group conveners
- 9:30 Luminosity
- 10:00 ISR
- 10:30 R
- 11:00 Tau

  11->12 Discussion+Conclusion

- 12:00 -> 13:30 Lunch

The report

- Provide a reference for the experimental/theorysts working on this field
- Title: “ “
- ~200 pages (on ACTA format ~100 EPJC) (50 pages for each section)
- Journal: Acta available, EPJC contacted waiting for the answer , others?
- Decision on Journal will be chosen by the end of October

Autorship

- Each section signed by all the contributors. 2 conveners identified as contact persons
- Someone should act as contact persons for the whole report. Henryk and I available
- All the names in the first page?

Work organisation (I)

- Introduction
- 4 sections:
- “R measurement with direct scan”: A.Arbuzov, G. Fedotovich
- “R measurement with ISR”: H. Czyz, S. Mueller
- “Luminosity”: G. Montagna, F. Nguyen
- “Tau”: Z. Was, S. Eidelman
- Conclusion and outlook

Work organisation (II)

- Each section should describe the “state of art” with comparisons between different generators (where available), and address theoretical and experimental issues. Discuss also possible improvements (from Th/Exp).
- Conveners are responsible for:
  - Define the section outline/scheme
  - Involve the “experts”, asking for contributions
  - Editorial work of the section (put together the contributions, uniformize it, cover possible gaps, style checks, etc…)
- H. Czyz and I will be responsible for the final editorial work (collect the sections, introduction, conclusion, etc…)

Time schedule

- Deadline to be discussed with Journal.
- Let’s assume mid 2009: conveners are expected to finalize their contribution by the end of January 2009.

- A web page will be prepared for the repository of the files, etc…, password protected available to the contributors

A first “draft” for the luminosity from G. Montagna

Tord will discuss it tomorrow

Guido Montagna
after discussions with BabaYaga authors, H. Czyż, F. Nguyen, G. Venanzoni

Items to be discussed during the Beijing meeting are enumerated (13 points), underlined and highlighted in *slanted*

Draft of luminosity working group: measurement, theory and generators

Conveners: Guido Montagna (th., Pavia Univ. & INFN) and
Federico Nguyen (exp., Roma3 Univ. & INFN, KLOE Coll.)

Possible contributors:
a] all the authors of two–loop calculations involved in the WG
1. + collaborators of original two–loop papers?
b] the authors of original versions of Monte Carlo (MC) generators + collaborators of recent upgrades of them [BabaYaga@NLO, MCGPJ, BHWIDE, KKMC...]
c] all the people (theorists and experimentalists) contributing to tuned comparisons of MCs and experimental issues about luminosity

Contents