Openning Address at Eighth BES Annual Meeting

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Ladies and Gentlemen, Friends and BES Colleagues,

Welcome all of you to participate in the eighth BES annual meeting, especially those from our foreign collaborators and those from the new BES member institutes.

Last year, BES did face its most difficult time. At last BES meeting, we were not certain about how long the MDCII would last; and because the noise problems, BES had to take data with limited beam current during R test run; by various reasons, quite a lot young people left BES collaboration; and it was difficult to organize a team to construct the MDCIII at that time. Now one year has past, we can proudly say that, because the efforts of all BES people, especially the efforts of BES division leaders and group leaders, BES has past its most difficult time and has made great progresses. Now the MDCII holds on, the noise problem was solved, the MDCIII is under construction, and R measurement was successfully completed.

First of all, at the end of 1998, the so-called noise study group, consisted of experts from machine, electronics and detector, has finally identified the main noise source, the DCCT. By shielding the DCCT properly, the noise level of BES detector had reduced substantially. Before that, machine people had made great efforts to improve the shielding of the cables of electric separators by the detector, which also helped a lot in reducing the noise level. Right now, the noise is no longer the limiting factor in data taking.

BEPC stuff paid big effort in improving the BEPC luminosity, after they carefully tuned the machine, the luminosity was up by a factor of two compared with that before the upgrade. BES has reduced the event readout time from more than 20 ms to less than 10 ms. Both factors contributed to the increase of the data taking rate. Right now at J/psi, it will not be difficult to take about 200 K hadronic events each day. This makes it realistic now to plan to collect about 50 M J/psi events within next two years, which was not thought to be possible by most people last year.

This year's data taking schedule was very tight, because the machine started late than originally planed, and at least two months beam time have to be devoted to synchrotron radiation run, BES data taking time was squeezed somewhat, it was always a battle to get more beam time allocated and use the beam time more efficiently. Our BEPC friends were very understanding and supportive to BES experiment, they tried very hard to tune the machine to inrease the luminosity, especially at those low energy scan points, and generally during the run the machine was running quite smoothly. Without the support of our BEPC friends and their hard work, finishing our R measurement on time would be impossible.

It was not an easy task to run BES detector either. It was very frightening when one wire of MDC was broken at the very beginning of the run, and another wire might be broken at the very end. To some extent, it is very fortunate for BES that MDCII was not failing on us during the data taking. It would be very hard if we had to be forced to open the endcap to fix the broken wire if the problem was more serious, for example if some inner layer of MDC was affected by the broken wire, or if we were taking J/psi data, then it would have been a disaster. It illustrates that BES has to modify the endcap mounting mechanism as soon as possible, so if some MDC wire is broken again in the future, we can fix the problem within a couple of days.

BES detector has been in operation for 10 years, most of the components and the electronics are rather old. For example, wires in the shower counter detector were broken without an explanable pattern, so it is hard to find a solution to prevent the problem to develop further. It needs great care to maintain the detector and the electronics properly and fix the problems quickly if any thing happens. Thanks to the people on shift and those who take care of the detector and electronics, the data collection efficiency during R measurement was quite high and the quality of the data collected was rather good. We even managed to take additional data for scanning psi' peak and to take more data around 2.6 GeV to study the enhancement of R value at this energy. The successful completion of R data taking is also due to the hard work of our friends in the BEPC operation support division, and the stuff of our computer center contributes a lot in offline data processing. Lets thanks all those people who have contributed to this year's success so far.

The initial checks show that the data taken during the R measurement can lead to good physics results. We should now concentrate our efforts on the data analyses, in order to publish as much results as we can at this year's Lepton-Photon Conference, and get the results from the whole data set published as soon as possible. I believe that our R measurement results will contribute a lot in understanding the standard model and in predicting the Higgs mass.

In this annual meeting, the detailed progresses made in R measurement and other physics analyses will be presented and discussed. We should make a detailed schedule for physics analyses, try to get the results published as soon as possible, and as much as possible. The data taking stradegy for next year and beyond will be discussed. As already discussed at last BES meeting, for next two years, BES is likely to collect 50 M J/psi events. It is agreed that BES should be allocated about 5 months each year for data taking. The MDCIII construction status will be presented and the schedule will be discussed, we should make our plan about when MDC should be replaced, this may depend on our judgement about how long the MDCII will last, when MDCIII can be completed and the physics need. The performances of the detector will be presented, special cares and measures should be taken to insure BES stable operation for next a few years. Some adjustments of the running conditions may be needed for J/psi data taking to insure the data quality and the data taking efficiency. Progress has been made in moving the BES software to Linux, we should discuss whether BES should use Linux as our basic computing platform, and if so, how to check the programs carefully and when we should finish doing that? In view of the great computing resources needed for 50 M J/psi events, we should pay more attention about this.

For the past year, IHEP has made serious efforts in restructuring our lab, taking some reform measures to motivate our people and to improve the working efficiency. BES has also made some improvement in its organization, so the responsibility of each person becomes more clear and individual person can involve in more work. The initial outcome of the reform is that BES data taking and data analyses become more smooth and efficient, more youth people take major responsibility in BES collaboration. As regard to the participation of other Chinese institutes in BES, efforts should be made to better define the role of each party in the BES collaboration and increase their involvement in the detector operation and data analyses.

Last year, we have succeeded in obtaining the support from Chinese Academy of Sciences and National Natual Science Fundation for BES physics analyses. Right now, IHEP is concentrating on obtaining substantial increase of fund from Chinese Government for BEPC operation and for the replacement of old parts. Some fraction of this fund will be used to support the R and D efforts for Advanced Facility for Tau-Charm physics, it would be either to build a tau-charm factory or to make further BEPC upgrade. Right after the BES annual meeting, there will be a workshop to discuss the stradegy for future tau-charm physics study in China, I hope those who are interested can participate in the discussions and contribute your opinions.

I hope the eighth BES annual meeting will be a great success.

Thanks.