

# Shift Committee Report

**Presented by  
Weiguo Li (Chair)**

**Members:**

**Georgi Chelkov , Mali Chen,  
Dan Cronin-Hennesy, Chunxiu Yu**

**BESIII 2008 summer meeting**

**attended also by BESIII spokespersons and others**

**June 8, 2008, Hefei**

## **Agreed principles**

- **The shift load should be distributed among BESIII institutes according to the number of authors from each institute who will sign BESIII physics papers.**
- **Every year, BESIII data taking may have up to 6 months. In 2008, regular shifts started June 7, likely till end of 2008. (it is possible toward end of 2008, BEPCII may change to synchrotron radiation run).**
- **It is allowed to change author list this year. So far there are 217 authors. Please modify your author list within two weeks. Send mail to IB chair. If no mail is received, the author list will be effective in 3 weeks.**

➤ **Every institute has the freedom about who should take the shifts, for how long. As long as it takes its share. The students from other institutes stationing at IHEP will take the shares of their home institutes.**

➤ **The shift duty is accumulative, if some institutes can not meet their share this period, they should catch up in the following run period.**

➤ **The sharing of shifts will based on shift points, it is planned that each day there are 3 shifts:**

**Day shift 8:00-16:10; Evening shift 16:00-24:10;**

**Night shift 24:00-8:10. 10 minutes for exchanging information.**

➤ **To encourage people to take shifts in night, and in Chinese National Public Holidays (11 days/year).**

**Shifts will have different points, and share of shifts will be based on shift points.**

**Regular day and evening shifts 1.0**

**night shifts 1.5**

**National Holiday day and evening 1.5**

**night shift 2.0**

**Can be adjusted later if agreed.**

➤ **It is not allowed for one person to take two shifts continuously (16 hours).**

➤ After shifts are assigned, it is allowed to exchange shifts if agreed by two persons, but shift chief can only be replaced by another shift chief, and this should be entered in the shift table. Before September through Chen Mali, after September through shift software.

➤ The shift software for people to selecting their shifts is in operation, originally aim for August. But during this meeting, the BESIII management decided that, it is not ready to assign shifts using this software for August 08. The august shifts will be assigned as in July, and the software for selecting shifts will start from September.

**All the shifts from June 7 2008 will be counted.**

# Shift arrangement

- **There will be one weekly shift coordinator who will be responsible for data taking in the week.**
- **Now the shift will have two persons, one shift chief, one shift person, shift chief should be qualified and picked by BESIII run coordinator.**
- **There are on-call persons, responsible for solving problems in their systems. 24 hours on duty.**
- **Now weekly coordinators, shift chief and on-call persons are appointed, more people can serve these rolls after they are qualified and want to.**

# Shift Points

- **weekly run coordinators, one point/day.**
- **A shift chief and a shift person (two for 2008 now, we will see if two persons are enough when data taking starts).**

**The point for regular shift is 1, owl shift is 1.5,  
for Chinese National Holiday (11 days),  
day and evening shifts count 1.5, Owl shift 2.0.**

- **On-call duty contribution will be counted.**

- 1. On-call persons are not required to take regular shifts.**
- 2. There are 15 systems, one system for one week counts for one shift point, this year.**
- 3. At shift committee meeting, the second method is preferred.**

# BESIII On-call systems

**MDC**

**MDC electronics**

**EMC**

**EMC electronics**

**TOF**

**TOF electronics**

**Muon**

**Muon electronics**

**Gas + Beampipe**

**Online DAQ**

**Trigger**

**SC magnet**

**Slow control**

**Software + DQM**

**Luminosity + gas monitors**

## Shift points accounting

**Regular shifts 1471 points, total 208 days (including 5 national holidays): average point/shift ~1.18**

**Weekly coordinator: 208**

**On-call:  $15 \times 208 / 7 = 446$**

**Total shifts points = 2125**

**$2125 / 217 = 9.8$  shift points/author ~8.3 shifts**

| <b>Institution</b>                      | <b>Author</b> | <b>Run- Coordinator&amp; On-call</b> | <b>points</b> |
|-----------------------------------------|---------------|--------------------------------------|---------------|
| <b>Bochum University</b>                | <b>4</b>      |                                      | <b>39.2</b>   |
| <b>Carnegie Mellon University</b>       | <b>1</b>      |                                      | <b>9.8</b>    |
| <b>CCAST</b>                            | <b>1</b>      |                                      | <b>9.8</b>    |
| <b>Graduate University of CAS</b>       | <b>3</b>      |                                      | <b>29.4</b>   |
| <b>GSI Darmstadt</b>                    | <b>2</b>      |                                      | <b>19.6</b>   |
| <b>Guangxi Normal University</b>        | <b>2</b>      |                                      | <b>19.6</b>   |
| <b>Guangxi University</b>               | <b>3</b>      |                                      | <b>29.4</b>   |
| <b>Henan Normal University</b>          | <b>2</b>      |                                      | <b>19.6</b>   |
| <b>Huazhong Normal University</b>       | <b>3</b>      |                                      | <b>29.4</b>   |
| <b>Hunan University</b>                 | <b>3</b>      |                                      | <b>29.4</b>   |
| <b>Institute of High Energy Physics</b> | <b>111</b>    |                                      | <b>1087.8</b> |
| <b>JINR</b>                             | <b>8</b>      |                                      | <b>78.4</b>   |

| <b>Institution</b>                             | <b>Author</b> | <b>Run- Coordinator&amp; On-call</b> | <b>points</b> |
|------------------------------------------------|---------------|--------------------------------------|---------------|
| <b>Liaoning University</b>                     | <b>1</b>      |                                      | <b>9.8</b>    |
| <b>Nanjing Normal University</b>               | <b>7</b>      |                                      | <b>68.6</b>   |
| <b>Nanjing University</b>                      | <b>4</b>      |                                      | <b>39.2</b>   |
| <b>Nankai University</b>                       | <b>4</b>      |                                      | <b>39.2</b>   |
| <b>Peking University</b>                       | <b>6</b>      |                                      | <b>58.8</b>   |
| <b>Rensselaer Polytechnic Ins.</b>             | <b>2</b>      |                                      | <b>19.6</b>   |
| <b>Shandong University</b>                     | <b>4</b>      |                                      | <b>39.2</b>   |
| <b>Shanxi University</b>                       | <b>4</b>      |                                      | <b>39.2</b>   |
| <b>The Chinese University<br/>of Hong Kong</b> | <b>1</b>      |                                      | <b>9.8</b>    |
| <b>The University of Hong Kong</b>             | <b>2</b>      |                                      | <b>19.6</b>   |
| <b>Tsinghua University</b>                     | <b>4</b>      |                                      | <b>39.2</b>   |
| <b>Universitaet Giessen</b>                    | <b>3</b>      |                                      | <b>29.4</b>   |

| <b>Institution</b>              | <b>Author</b> | <b>Run- Coordinator&amp; On-call</b> | <b>points</b> |
|---------------------------------|---------------|--------------------------------------|---------------|
| <b>University of Hawaii</b>     | <b>5</b>      |                                      | <b>49.0</b>   |
| <b>University of Minnesota</b>  | <b>3</b>      |                                      | <b>29.4</b>   |
| <b>University of Rochester</b>  | <b>1</b>      |                                      | <b>9.8</b>    |
| <b>USTC</b>                     | <b>18</b>     |                                      | <b>176.4</b>  |
| <b>University of Washington</b> | <b>1</b>      |                                      | <b>9.8</b>    |
| <b>Wuhan University</b>         | <b>1</b>      |                                      | <b>9.8</b>    |
| <b>Zhengzhou University</b>     | <b>3</b>      |                                      | <b>29.4</b>   |
| <b>Total</b>                    | <b>217</b>    |                                      | <b>2126.6</b> |

➤ **Now weekly coordinators and on-calls will be shared by IHEP and USTC.**

➤ **Round off number may carry over to the next run period**

➤ **The numbers will be recalculated after the author list is updated (within two weeks) according to the above formula.**

## **Expectation for next year**

**When the data taking becomes smooth, the contribution for on-calls may be adjusted.**

**Expectations for next run period:**

**Data taking time: 180 days**

**On-call accounting reduced by a factor of 2**

**Then total shift points  $\sim 1471 \times 180/208 \sim 1273$**

**Weekly coordinator 180**

**On-call  $15 \times 180/7/2 = 193$**

**Total = 1646**

**$1646/217 \sim 7.6$  points  $< 7$  shifts/author**

## **Shift selecting procedure after shift software is in operation (Beginning of August)**

**1. Open shifts for foreign institutes for one week, another week for non-Beijing Chinese Universities. At last, Beijing institutes. Will be controlled by software.**

**2. At least 1/3 shifts should be night shifts for any institute, unless they are forced to take other shifts.**

**It is better the persons need traveling do not select shifts after Dec. 15 this year.**

**3. Again, the institutes do not take their share for this period have to catch up in the next period.**

# Training and Documentation

- **Some training is required for people to take shifts, Persons taking shifts should get familiar with shift operations before taking shifts. It is suggested that shift persons taking 1<sup>st</sup> shift should arrive early (one day?).**
- **Right now, shift chiefs should be qualified**
- **Documents for shift duties and technical instructions now exist, will be improved gradually.**

**If there is some problem for shift software  
please write to**

**Daniel Cronin-Hennessy**

**hennessy@physics.umn.edu**

**Mali Chen**

**chenml@ihep.ac.cn**

**To facilitate the use of the shift software (thank to UMN), the  
IB member from each institute should send a list of people  
who need an IHEP computer account to chenml@ihep.ac.cn,  
so everybody can assign shifts when the system is in  
operation again ASAP.**

# Summary

- **Shifts in 2008 are scheduled.**
- **Final sharing will be updated within 3 weeks for this year. The change of shares will be small.**
- **Shift documents exist, need improvements.**
- **Taking shifts, insuring the data taking safety, quality and efficiency are every member's responsibility.**
- **Will ask IHEP to schedule the future run period well advanced each year.**

Thanks