

Program

December 9

- 9:00– 9:30 Registration
- 9:30– 9:40 Welcome and the goal of this meeting T. Kajita (ICRR)
- 1. Atmospheric neutrino oscillation**
- 9:40–10:30 Sub-dominant oscillation effects in atmospheric neutrinos M. C. Gonzalez-Garcia (CERN/SUNY/Valencia)
- 10:30–11:05 Three-flavor subleading effects and systematic uncertainties in Super-Kamiokande E. Lisi (Bari)
- coffee*
- 11:30–11:55 Constraint on θ_{13} from the atmospheric neutrino data from Super-Kamiokande K. Okumura (ICRR)
- 11:55–12:35 Effect of the solar terms to the θ_{23} determination in Super-Kamiokande and important systematic error for future improvements S. Nakayama (ICRR)
- lunch*
- 14:00–14:30 Future possibilities M. Shiozawa (ICRR)
- 2. Input data to the neutrino flux calculation**
- 14:30–15:00 Primary cosmic ray fluxes at various solar activities Y. Shikaze (JAERI)
- 15:00–15:30 Atmospheric muon fluxes at various locations T. Sanuki (Tokyo)
- 15:30–16:00 Hadron production experiments G. Barr (Oxford)
- coffee*
- 3. Flux calculation: method and technique**
- 16:30–17:00 Flux calculation in HKKM M. Honda (ICRR)
- 17:00–17:30 Flux calculation in Bartol G. Barr (Oxford)
- 19:00–21:00 *Banquet*

December 10**4. Flux calculation results, and the estimated systematic errors**

- | | | |
|-------------|--|------------------|
| 9:30–10:05 | Flux calculation results and the systematic errors in HKKM | M. Honda (ICRR) |
| 10:05–10:40 | Flux calculation results and the systematic errors in Bartol | G. Barr (Oxford) |

coffee

- | | | |
|-------------|---|--|
| 11:10–11:40 | Discussion on flux calculation improvements | Discussion leader:
P. Lipari (Rome) |
|-------------|---|--|

*lunch***5. Neutrino interaction**

- | | | |
|-------------|--|---------------------|
| 13:30–14:00 | NEUT: neutrino interaction code used in Super-Kamiokande and K2K | J. Kameda (ICRR) |
| 14:00–14:30 | Neutrino interaction measurements in K2K (Scibar) | M. Hasegawa (Kyoto) |
| 14:30–15:00 | Neutrino interaction measurements in K2K (1kton water Cherenkov) | J. Kameda (ICRR) |

coffee

- | | | |
|-------------|---|--------------------------|
| 15:30–16:15 | Inclusive quasi-elastic neutrino reactions | J. Nieves (Granada) |
| 16:15–16:45 | Comparison of quasi-elastic cross sections using spectral functions with (e, e') data from 0.5 to 1.5 GeV | H. Nakamura
(Waseda) |
| 16:45–17:15 | How to test QE neutrino-nucleus interaction models using the data of QE lepton-nuclear interactions | A. V. Butkevich
(INR) |

December 11

- | | | |
|-------------|---|---|
| 9:30–10:00 | Delta production | J-Y. Yu (Dortmund) |
| 10:00–10:30 | Issues in the region of quasi-free delta production | R. Seki (Caltech) |
| 10:30–11:00 | Discussion on cross section | Discussion leader:
R. Seki (Caltech) |

lunch

- | | | |
|-------------|---------|------------------|
| 13:00–14:00 | Summary | P. Lipari (Rome) |
|-------------|---------|------------------|