Foreword

The fourth workshop was expected to be succeeded to colleagues of SSC, because it might be held at Dallas if SSC didn't meet the difficulty contrary to our expectation. In the meantime, I received a mail requesting to have this workshop at KEK. It is honorable to us to serve as a host institute after the third workshop at Annecy in 1993 and it is a great pleasure to welcome participants to the Fourth International Workshop on Accelerator Alignment at Tsukuba which is abbreviated as "IWAA95" instead of "WOAA" adopted by the previous workshop.

The KEK is located northernmost in the Tsukuba Science Town and is rather difficult in transportation from the center of the town. It is a reason why the bus was chartered to commute between the hotels and KEK. The workshop was forced to be set up in November in 1995 because the TRISTAN Main Ring is scheduled to be evacuated early in 1996 for the construction of KEKB-factory and is indispensable for the workshop to see how the TRISTAN magnets were aligned. During the workshop everyday was warm to travel and to enjoy the KEK tour being blessed with an Indian summer.

This workshop was supported by grants-in-aid by the Ministry of Education, Science, Sports and Culture, the Tsukuba EXPO'85 Memorial Foundation and the Foundation for High-Energy Accelerator Science. We are very grateful for their kind support and express our sincere thanks to them. Thus some colleagues from Russia, China and India could join us. Participants were more than 100 people from 47 laboratories, institutes or companies which are related to the precise survey and alignment in the field of accelerator. We had 48 contributions in 3 days covering the recent development in precise alignment, surveying instrumentation and devices, ground motion, conglomerated alignment system, beam-based alignment method, and demands in alignment of linear collider. Time schedule was rather tight and everybody was compelled to present in a short time. All attribute to our organization. Hopefully, discussions and communications will be continued after the workshop.

Among topics the beam-based alignment method has been developed and is being investigated almost by young accelerator scientists. It shows the accelerator still offers new challenging problem and requires new technology. If considering the two ring collider such as B-factory and linear collider, the alignment problem will be more concerned with beam dynamics and will be imposed more strict tolerance than ever. I feel that the recent accelerator studies using beam monitors are becoming more precise and can sense the tiny machine errors. In other words, result of alignment appears in the beam orbit. I think this workshop will make an advance to this direction and hope this approach will be considered in the future international workshop on accelerator alignment.

Finally I must express my thanks to R. Sugahara and Y. Nagashio for their intensive secretarial work in organizing this workshop.

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