

Balantekin's Report for his trip to Japan in July 2008:

My trip to Japan had three parts. Between July 20 and 26, I attended the "Hokudai-TORIJIN-JUSTOPEN-EFES workshop "Perspectives in Resonances and Continua on nuclei" and the joint JUSTIPEN-EFES-Hokudai-UNEDF Meeting held at the Onuma International Seminar House, Hokkaido as the representative of the JUSTIPEN Steering Committee. This meeting went very well: the reports from collaborative efforts between Japanese and U.S. researchers nicely demonstrated the utility of the JUSTIPEN concept and the organization. JUSTIPEN seeks to deliver an international venue for research on the physics of exotic nuclei during the new era of experimental investigation of rare isotopes, and in these meetings fruits this concept was evident. There were many lively discussions. Theorists from the Hokkaido University, who played a large role in the organization of the meetings, expressed their wishes to see more JUSTIPEN-related visits to Hokkaido.

I have also had a dinner with the representatives of the Japan Society for the Promotion of Science (JSPS) as a U.S. JUSTIPEN Board Member. Our Japanese colleagues on the JUSTIPEN Governing Board also joined us. First of all, JSPS representatives were very happy with DOE's decision to fund JUSTIPEN, which they thought was a model for other collaborative efforts. JSPS representatives were also very pleased that many young people from the U.S. came to the meetings as well as to other JUSTIPEN-supported activities in the past. This is one of the many reasons why Taka Otsuka wishes to have more graduate students and postdoctoral research associates attend summer schools organized in Japan.

On July 26, I moved on to the Tohoku University at Sendai. I have a long-standing collaboration with the faculty at Tohoku University, where I myself have served as a faculty member during a sabbatical, dating back to 1983. My original collaborator, Noboru Takigawa, recently retired; but I continue to collaborate with Kouichi Hagino, who is nicely keeping nuclear theory at Tohoku alive and very active. We discussed our joint projects, especially means to combine data from quasi-elastic and subbarrier fusion reactions. This is a subject which will be important to understand low-energy reactions of exotic nuclei.

On July 28, I took a train to Mitaka near Tokyo to visit the National Astronomical Observatory of University of Tokyo to visit the nuclear astrophysics group headed by Taka Kajino. We have discussed several of our collaborative projects. A former student of mine, Yamac Pehlivan, is now a postdoctoral research associate with Professor Kajino. She also joined our discussions. Our discussions included exploring better approaches to the photonuclear reaction rates and exploring the role of neutrinos in both the Big-bang (light elements) and core-collapse supernovae (r-process) nucleosynthesis.

I continue collaborating with both Sendai and Mitaka groups.

I returned back to the U.S. on July 30. This trip was not only very useful to me for my own research, but also it very much reinforced the very positive role JUSTIPEN is playing in the collaborative efforts between two countries.

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