

Satoshi Ozaki: A Legacy of International Collaboration at KEK

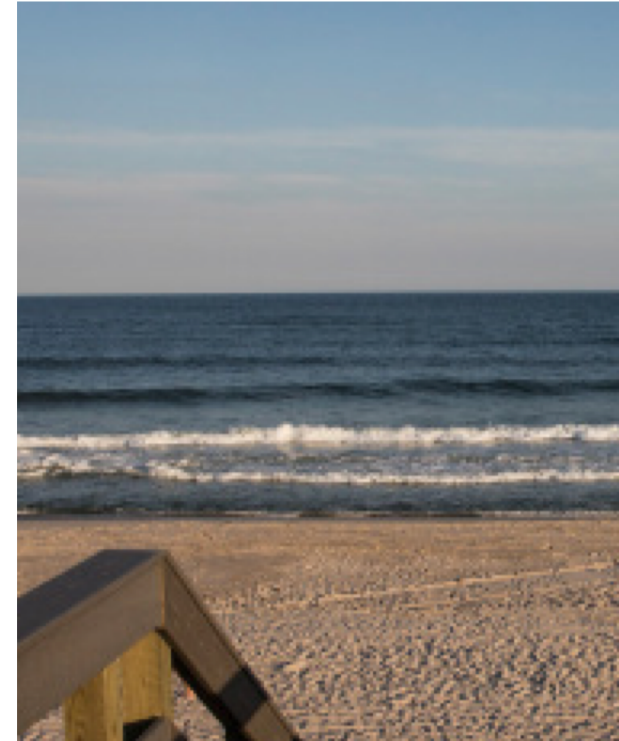
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My history with Satoshi Ozaki

- When I was very young
 - many summers at BNL, a vacation resort
 - Pool, beaches, large playground, other children
 - Learning how to ride a bicycle
 - Mr. Ozaki, tour guide of the AGS



My history with Satoshi Ozaki

➤ When I was young

- 1982: PhD, UC Berkeley, with PB Price: Search for Highly Ionizing Particles at PEP ($e^+e^-/29$ GeV) → postdoc on CLEO experiment ($e^+e^-/9-11$ GeV)
- 1983: at Lepton-Photon Symposium at Cornell
 - Ozaki, TRISTAN Director, soliciting proposals for Oho, Nikko IR's at TRISTAN; encourages young postdoc inquiring about a Search for Highly Ionizing Particles (SHIP) at TRISTAN



My history with Satoshi Ozaki

➤ When I was young

- 1984: postdoc → Assistant Professor; Proposed SHIP at TRISTAN, approved(!) for Nikko Hall (Nikko-Maru)
- 1985-9: A VERY inexperienced PI/group leader is coached by Ozaki-sensei through assembling collaborators, NSF funding.
- Successful collaboration [with K. Nakajima (KEK), M. Fujii (ISAS), S. Tasaka (Gifu U), P.B. Price (Berkeley)]
- PRL **60**, 1610 (1988); Phys. Lett. **B228**, 543 (1989) (no monopoles, sorry)

Looking back: Satoshi Ozaki's time at KEK

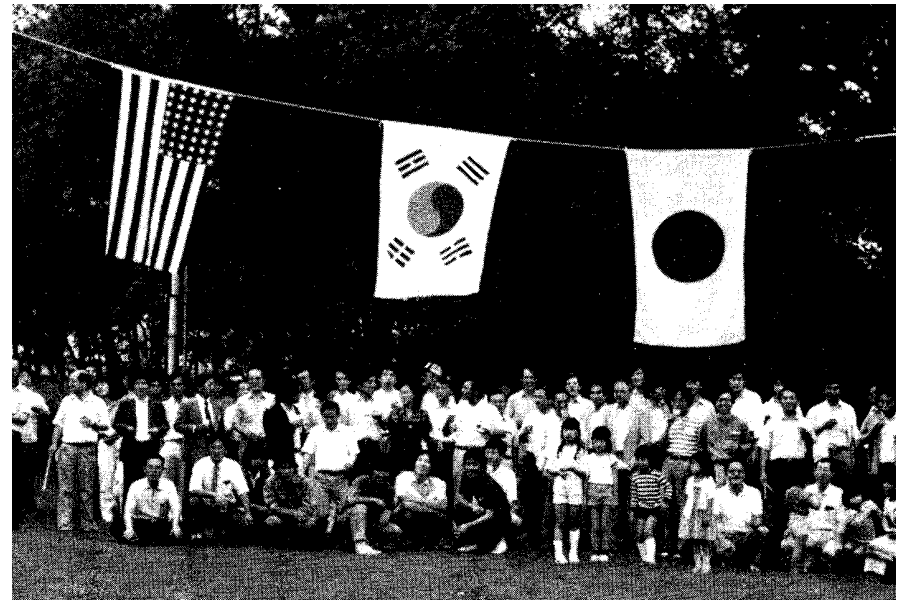
KEK was also in a formative period

- With TRISTAN ($e^+e^-/62$ GeV), Japan joins an exclusive club: host to a world-leading accelerator
 - Reverse brain drain
 - Tribute to economic success, education system
- Internationalization is seen as essential
 - Best science \leftrightarrow largest possible talent pool
 - Communication (in English) for broad recognition

Looking back: Satoshi Ozaki's time at KEK

➤ KEK's road to internationalization

- International call for proposals
 - Some bumps in the road
 - AMY collaboration (Japan+US+Korea+China)
S. Olsen (spokes), Y. Sakai, K. Abe, ...
 - SHIP (US+Japan)



AMY (CERN Courier, 1985)

K. Kinoshita, Satoshi Ozaki Memorial Symposium, April 20, 2018

Looking back: Satoshi Ozaki's time at KEK

➤ KEK's road to internationalization

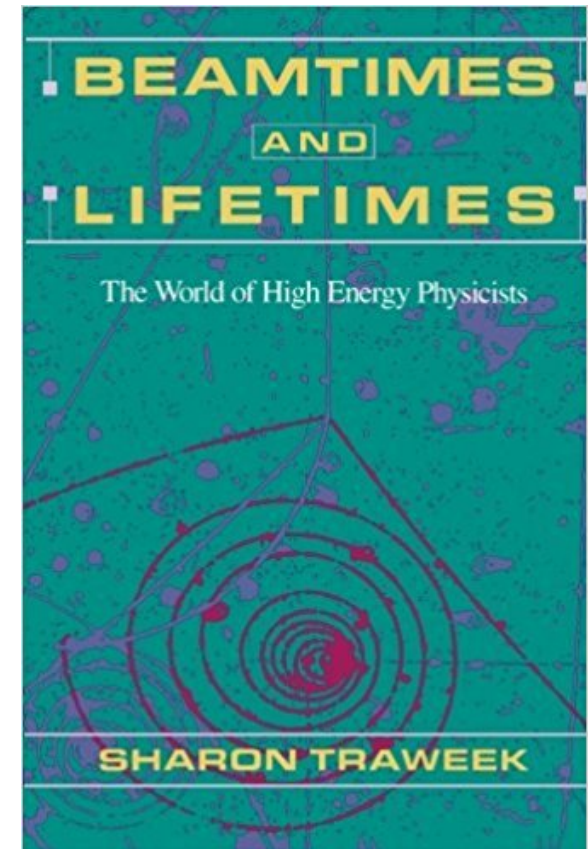
- practical challenges, including
 - Communications: how to say/hear yes/no
 - Trans-national funding administration
 - Cultural – organizational structures, research styles
 - A myth of Physics: “a culture of no culture,” that physics research, like physics itself, is cultureless – not influenced by the cultural origin of the researchers

Looking back: Satoshi Ozaki's time at KEK

➤ KEK's road to internationalization

Cultural issues:

- “Beam times and Lifetimes,” by Sharon Trawee: comparative anthropological examination of HEP collaborations & community, Japan (KEK)-US (SLAC)
 - Japan: hierarchical, emphasis on teamwork
 - US: emphasis on the individual, “lone genius”
- Both systems have strengths (& both disadvantage women, using different stories)



Looking back: Satoshi Ozaki's time at KEK

➤ KEK's road to internationalization

Cultural revolution

- ≈1985: Young Japanese (H. Aihara, H. Kioso, ...) propose $\Upsilon(4S)$ experiment at KEK accumulator ring
 - Radical, not part of the plan (declined)
... and challenge to the hierarchy
 - A seed was planted!

Looking back: Satoshi Ozaki's time at KEK

➤ KEK's road to internationalization

- life at KEK for foreign visitors
 - KEK gains features of BNL
 - Family housing
 - Swimming pool, gymnasium, tennis courts
 - Still, life at KEK/Japan was not for the unadventurous
 - Everything runs well, provided each person understands the system
 - staff accompany gaijin when necessary (often)
 - Network was in early stages ≈1984, 7 bitnet accounts (in all of Japan)
 - Foreign exchange takes ≈ 1 hour at the bank; no credit cards
 - Cafeteria closed weekends, no food within near biking distance

Today: The Legacy

- Expanding internationalization at KEK
 - Belle/KEKB (>14 nations)
 - 2008 Nobel prize – another for Japan HEP theory
 - K2K (\approx 10 nations)
 - T2K (\approx 12 nations)
 - Belle II/SuperKEKB (>25 nations)

The Legacy

➤ life at KEK for foreign visitors

- Everything runs well, provided each person understands the system
 - User's Office/International Office
 - User groups give feedback, services improve
- Connected worldwide: grid, remote conferencing
- ATM's, credit cards
- McDonald's, Kasumi

The Legacy

➤ Facing the challenges

- Despite a “Culture of no culture,” HEP institutions are organized based on the structures of society; they arrive at a “way of working” that is hard to change once established.
- Experimental HEP requires large budgets, high degree of organization & team work, at risks to creativity.
- When different cultures come together to collaborate, each contributes strengths, disruptions happen

The Legacy

➤ Facing the challenges

- Disruption forces out-of-the box thinking
 - e.g. Belle great teams, out-of-the box discussions
→ X(3872); $\Upsilon(5S)$ program, Z_b 's
- Let us embrace disruption, find better ways for our organizations to run, support collaborations and individuals, and make discoveries!

Let us celebrate the legacy of Satoshi Ozaki.