



# ILC News Vol. 32

Mar. 2020

Ichinoseki Linear Collider Bulletin

English Translation

## Dr. Peter Higgs talks about the Higgs Boson Discovery and ILC at the ILC Symposium

An international symposium for the ILC was held on February 8th at the University of Tokyo's Ito International Research Center. Satellite venues which aired the event were set up at Iwate University, Hiroshima University and Kyushu University. Six hundred participants were in attendance across all venues. Dr. Peter Higgs, who won the Nobel Prize for Physics in 2013, gave a video message, and a panel discussion was held by Dr. Makoto Kobayashi, who won the award in 2008.

### Excerpts of Peter Higgs' address (translated from Japanese back into English)



I predicted the existence of a new particle (the Higgs boson) in 1964, and it was confirmed in 2012 by experiments at the European Organization for Nuclear Research (CERN). Since then, experiments on the properties of particles have been conducted by CERN's Large Hadron Collider (LHC).

Constructing an accelerator is a major task that will take at least 10 years, but it's necessary to quickly develop a next generation facility that can produce a large amount of elementary particles. Japan, a candidate to host the ILC, is in a position to lead Higgs boson research. While such new scientific research programs may sound like a burden to the economy, the impact on the local economy by building facilities and researching, will overcome it. I wish you success.

### Excerpts of Hitoshi Murayama's talk



At a research facility called CERN in Europe, people from conflicting countries such as Israel and Palestine gather together and conduct research. The web was created to allow such people to share data together. The web developed at CERN has played a role in connecting people around the world.

Pursuing questions that are shared by humanity, involves working together regardless of conflict between countries. CERN has been selected as a UN observer for achieving this and leading world peace through fundamental research. I believe that if a facility for gathering researchers from all over the world, such as CERN, is built in Japan, it could contribute to world peace. I believe the ILC can be a facility that not only uncovers our roots but also will contribute to the world in various ways. I definitely want the ILC in Japan.

## Pick Up News

### ILC-related seminars at Ichinoseki Daini High School

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At Ichinoseki Daini High School, an ILC-related seminar, 'Thinking about the Future of the Community' was held by the school and city. Two hundred first-grade students received a lecture on the outline of the ILC and town development. The students then in groups, discussed future town development, put together a poster and made a presentation.

### ILC-related lectures at Hanaizumi High School

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On November 28th, an ILC-related lecture 'Let's think about the local region in regard to the ILC' was hosted by the school and city. Professor Shinya Narita of Iwate University and Amanda Wayama of Iwate Prefecture Office of International Affairs gave a lecture on the outline of the ILC, future urban development, and multiculturalism to all 105 students of the school.

### Ichinoseki Technical High School students make a school visit

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'Let's learn along with High School Students! Electricity in our daily lives' by the Ichinoseki Technical High School Visiting Class Program was held on February 12th, at Akogi Elementary School. Eight students of the electronics department received a lecture on the ILC in advance to prepare their own teaching materials, which were used to explain the ILC to a science class of 48 sixth-grade students at Akogi Elementary School.

### Special ILC classes at junior high schools

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Ichinoseki carries out special lessons on the ILC to junior high school students within the city. In February, lectures and cloud chamber experiments were conducted at four schools (Hagisho, Ohara, Sakuramachi, Okita) by Dr. Masakazu Kurata, researcher at the Institute for Particle and Nuclear Research, High Energy Accelerator Research Organization (KEK).

## Q & A Corner

Q: What are the advantages of the ILC?

A: The ILC is a major project that will conduct world-leading research and help model a foundation for international scientific and technological innovation. In terms of Iwate of Northern Japan, a large number of human resources will be established and exchanged, plus the ILC will become a symbol of creative reconstruction following the Great East Japan Earthquake and Tsunami. In addition to its physical significance, the ILC is expected to bring new life to the region as prefectures and related organizations are working together toward the following.

1. Foreign researchers, cutting-edge technologies, and diverse local resources (primary industries, local businesses, etc.) will combine to form an international research hub where people, goods and information travel to and from, around the globe.
2. With the establishment of an innovation hub that supports the industrialization of ILC-related technologies and research results, Iwate will become a region of choice from companies around the world, drawing in people and goods, and creating new service industries. The region will be bustling with activity.
3. Town planning will promote sustainable and energy-efficient management, such as the development of research and living facilities using prefectural timber, and the utilization of energy using the exhaust heat from the ILC.
4. Convenience for foreign researchers and their families, and local residents living in the community will increase with the introduction of the Internet of Things (IOT), artificial intelligence (AI) and the use of automatic translation in various fields, such as medical care and education, creating a community where cultures integrate.
5. With the construction of the ILC will come advances in science tourism which will utilize prefectural science facilities such as science museums and observatories. Science communication between foreign researchers and students would further science and technology education. It'll create a sphere in which many would visit.

## News Clippings

### **Kenshi Hirokane receives a special manga award**

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On January 25th, the Iwate Manga Grand Prix and the Mangakyo Iwate Special Prize award ceremonies were held. Manga artist Kenshi Hirokane received a special award for contributing to the publicizing of the ILC through his manga, Chairman Kosaku Shima. Hirokane, who spoke with Governor Tasso said, "I hope many people get to know about the ILC."

### **The 2020 Academic Master Plan announced**

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The Science Council of Japan (SCJ) published the 2020 Academic Master Plan on January 30th, and the ILC project was placed as a project within the list of 'Large-Scale Research Projects' with academic significance. MEXT selected the ILC as a candidate for further hearings, which is part of the process for eventually being selected as an important large-scale project.

## Mamoru Oshii Wanko Soba Contest

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On February 11th, Hanamaki held a Wanko Soba (competitive eating of buckwheat noodle) Contest where film director and ILC Supporter's founder, Mamoru Oshii participated as a guest. At the talk show, he spoke about his hope for citizens to appeal to the government the necessity of the ILC as well as expressing his desire to work towards the construction of the ILC. Oshii ate 59 shots of buckwheat noodles.

## The ILC Promotion Model Schools present their results

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On February 19th, Iwate Prefecture hosted the 'Human Resource development for the future ILC' event where students of the eight ILC Promotion Model Schools gathered to discuss the results of their projects during the last fiscal year. Ichinoseki Daiichi High School, the city's sole participating school, presented on fieldwork which looked into the geography, history and environment around the ILC candidate site as well as results and considerations centered on their experiment, 'moving magnets with batteries'. At the end of the gathering, students

split into groups and discussed how they'd like to see Iwate change through the ILC.

## ILC commentary seminar held

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Eighty people attended the ILC commentary seminar held by the Tohoku ILC Preparatory Office and KEK at Okutama Citizen Center on February 2nd. The seminar was also held in Murone in December and in Higashiyama in January. The latest movements on the project and matters of interest concerning the ILC were addressed.

## Bell's Corner

### On sickness

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Anyone who falls ill overseas will most likely have some anxieties. An anxiety of mine was whether I should go to a specific clinic or hospital to have my symptoms seen. In Australia, as long as it's not an emergency, the first move would be to go to a GP. If the GP is unable to treat you, they will then refer you to the next step, whether it be to go to a hospital or a specialty clinic. As there is no GP system in Japan, this was the first time in my life where I had to think of what symptoms would correspond to what medical facility.

Besides the system, when a visitor from a foreign country comes to Japan, the first thing that would cause an issue is communication. From my experience, these are some common ways that foreign patients deal with communication issues in Ichinoseki: go to a medical facility with a friend or interpreter who can speak both the patient's native language and Japanese or utilize mobile applications (such as Google translate) to aid in

translation of symptoms and advice from doctors. In some more serious cases, people seek out hospitals with language support (medical staff who can speak the patient's native language) in larger cities such as in Sendai or Tokyo, or worst case, go back to their homes abroad.

Ichinoseki City provides multilingual support when calling an ambulance in emergencies (119) — for more info, refer to ILC NEWS vol. 29. The city's only hospital with an interpreting service in place is the Iwate Prefectural Iwai Hospital. English, Chinese, Tagalog and Korean interpreters can be dispatched for free when needed. For more information, contact the Oshu International Friendship Association.

## What brought you to Ichinoseki?



### **Yalan Koganemori (Taiwan)**

My marriage to a Japanese man was what brought me to Ichinoseki 21 years ago. As I married into a family that owns a rice farm, I also help out. A few years ago, I learned how to drive a combine. During these years, I was able to understand the hardships of farming.

Until recently, I also worked as an interpreter of Japanese and Chinese at a company. From last October, I began working at the Ichinoseki Tourism Association as a Chinese language support

staffer. My job entails assisting Taiwanese and Chinese tourists and translating important tourist information.

I want to study many things and keep improving myself.