

# An image of an international city of academic research centered around the ILC

- **International research center**  
Research zone, industrial-academic-government interaction zone, visitor zone, community zone, etc.
- **Research support facilities**  
Meeting rooms, accommodations
- **International communication center**  
Presentations of research results, venues for international conferences
- **International school**  
Provides international education in English, etc.
- **International Office**  
One-stop service that supports daily life in Japan for foreign researchers.
- **Residences for researchers**

## Spin-off effects of the ILC

Spin-offs

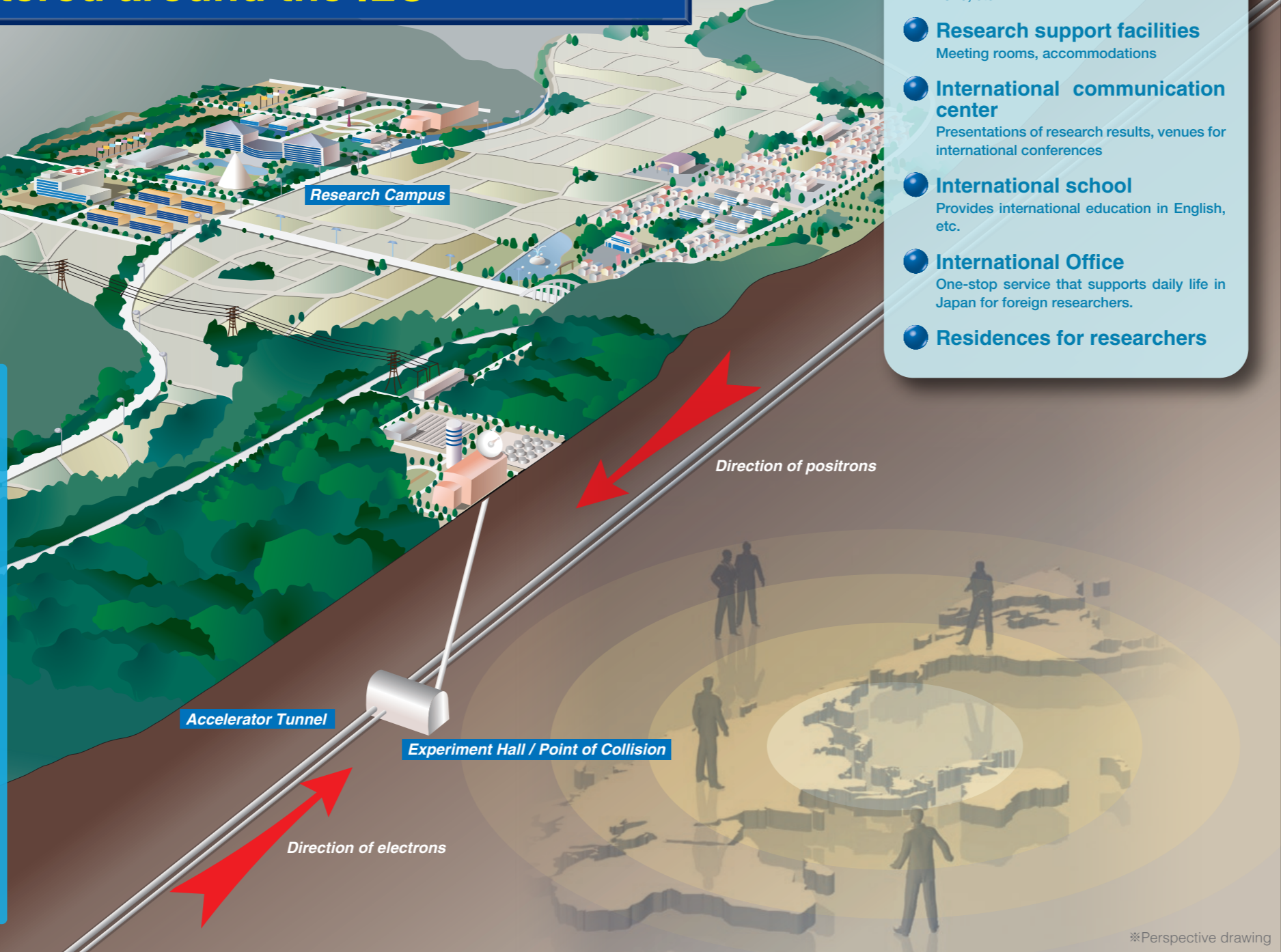
Morioka

ILC

Tohoku University

Sendai

Sendai airport



## Main Equipment within the ILC

### Accelerating structure



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Each cluster of 20 billion electrons or positrons is accelerated by 16,000 super-conducting accelerating cavities. Then, electron and positron pulses cross and collide 7,000 times a second.

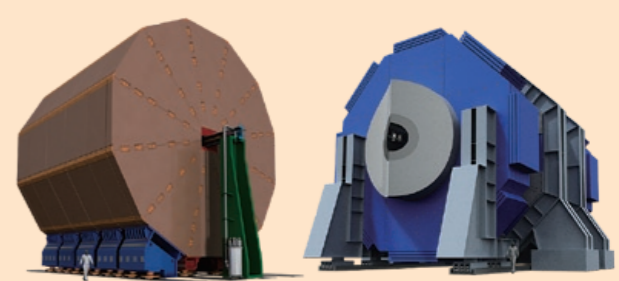
### Beam focusing system



※Source : KEK

This system squeezes the beam to an extremely small size near the collision point – the remaining beam is a few nanometers high and a few hundred nanometers wide.

### Particle Detector



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Electrons and positrons collide at almost the speed of light. The energy of the collision can be as large as 500 giga-electron-volts. In order to record such a massive collision, two particle detectors are installed at the center of the ILC. These particle detectors can be likened to huge digital cameras.

## If the ILC is built . . . . .

- **Tohoku will become a center of frontier-science and technology.**  
An international city will be formed where an estimated several thousand researchers and engineers will live with their families. Tohoku will become an international intellectual base that puts forth new ideas in science and technology.
- **New industries are expected to be created.**  
It is expected that new industries such as medicine, drug discovery, materials, IT, biotechnology, nanotechnology, and environmental industries will be created by forming accelerator-related industrial clusters which will be based around centers such as the international city and Tohoku University.

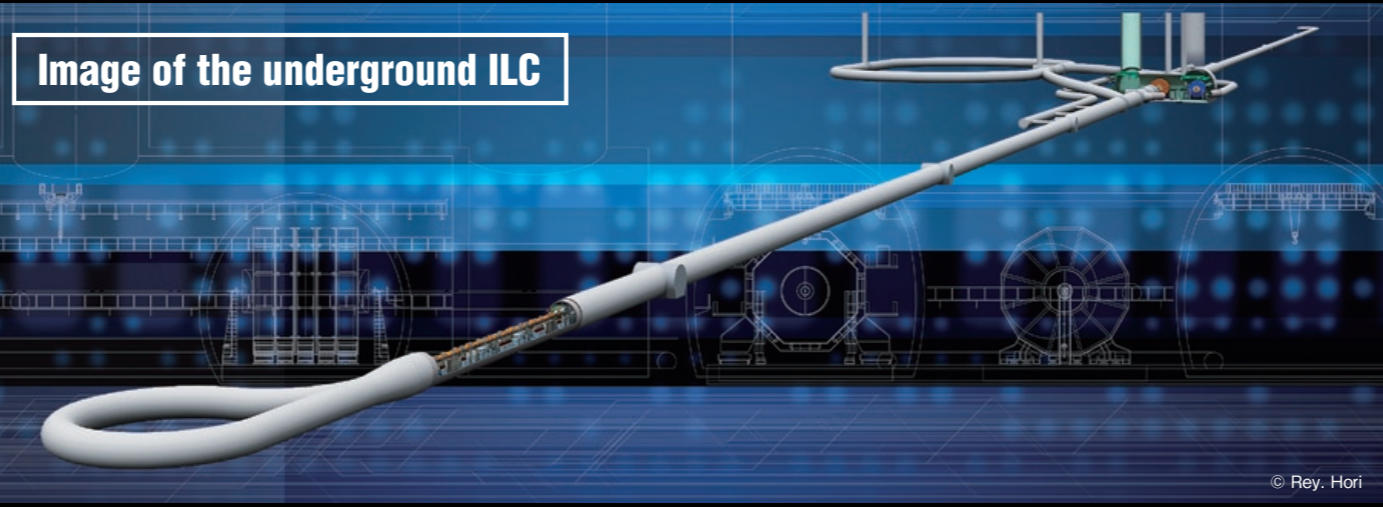


Image of the underground ILC

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