



Orchestrating our future through
the symphony of knowledge



Free admission

Venue	NTT WEST QUIP TBRIDGE PRISM 4-15-82 Higashinodamachi, Miyakojima-ku, Osaka 10 min. walk from north exit of Kyobashi Station on JR Osaka Loop Line; 10 min. walk from west exit of Kyobashi Station on Keihan Main Line; 5 min. walk from Kyobashi Station on Nagahori Tsurumi-ryokuchi Line on Osaka Metro
-------	--

[Register here](#)



Note: Videos of the talks will be uploaded to a special website for this event.

Professor Emeritus, Keio University
Director, Mutsumi Imai Educational Research Institute
Mutsumi Imai

Understanding embodied empathy and connecting distant families via bodily information transfer
Human Information Science Laboratory **Aiko Murata**

Prospects for reliable healthcare through infinite-hypothesis AI models that interpret biological phenomena
Media Information Laboratory **Masahiro Nakano**

Advancing self-supervised audio representation toward cutting-edge sound understanding with large language models

Media Information Laboratory **Daisuke Niizumi**

Understanding dialogue context through multimodal information and incremental response generation
Innovative Communication Laboratory **Yuya Chiba**

Learning companion robots for the future of early childhood education
Innovative Communication Laboratory **Yuko Okumura**

Note: The content of the research exhibits will be uploaded to a special website for this event .
At the venue, researchers will give explanations and demonstrations of their exhibits.



- Collaborative learning with multiple thoughts
Transparent prediction based on decision tree superposition
- Accurate spatial prediction with limited data
Meta-learning based on neural Gaussian processes
- AI can adapt to new environments without labels
Theoretical understanding of source-free domain adaptation
- Toward the realization of low-power optical AI
Training of optical neural networks with special structure
- A mathematical link for light-matter interaction
New unification through non-commutative harmonic oscillators
- Crafting noises in quantum computing!
Reshaping noises to improve accuracy of quantum computation

- **Touch experience without contact**
Non-contact rendering of texture by focused ultrasound
- **Cleaning-up speech from noisy, reverberant recordings**
Ensemble of multi-stream diffusion model enhances speech
- **Live streaming with real-time voice conversion**
Real-time voice conversion with high quality and low latency
- **Enhancing general data compression**
Code-tree sets for efficient versatile lossless encoding



- **Children behave well in front of a social robot**
Interactive robots promote children's prosocial behavior
- **Secondborns' lower verbal skills improve in school-age**
The effect of older siblings on child language development
- **Faithful translation without excess or deficiency**
Preference optimization for LLM-based translation
- **Capturing temporal relationship changes on SNS**
Social orbits: Linking SNS logs and sociological concepts



- Let me lead you through the city, empowered by AI
Toward a real-world deployment of tactile gadget Buru-Navi4
- Supporting family bonds with hospitalized babies
An embodied online visitation for NICU newborns and families
- Seeing the essence of baseball batting
Winning visual strategies of professional baseball players
- The “Batting eye” in action
Motor control underlies rapid decisions
- Unseen light that enhances cognitive task performance
Interventions in mental states via ipRGC-modulating light
- Is oversleeping on free days really a problem!?
Effect of chronic sleep debt on cognitive task performance

Communication Science Laboratories, Nippon Telegraph and Telephone Corporation
Tel:0774-93-5020 / E-mail:cs-openhouse-ml@ntt.com

https://www.kecl.ntt.co.jp/openhouse/2025/index_en.html
Check this website for regular updates.