



Introduction of Student life

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Self-Introduction



- 2015.6 – 2019.9, bachelor degree in **Physics**, China
- 2020.4 – 2022.3, master degree in **Applied Physics**, Japan
- 2022.10 ~ present, 5-year Ph.D. program in **Informatics**, Japan

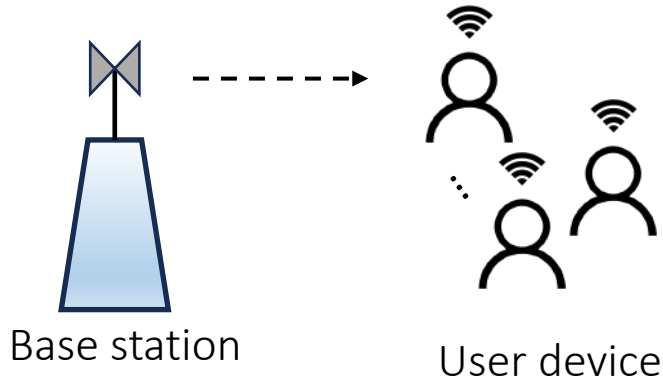


筑波大学
University of Tsukuba



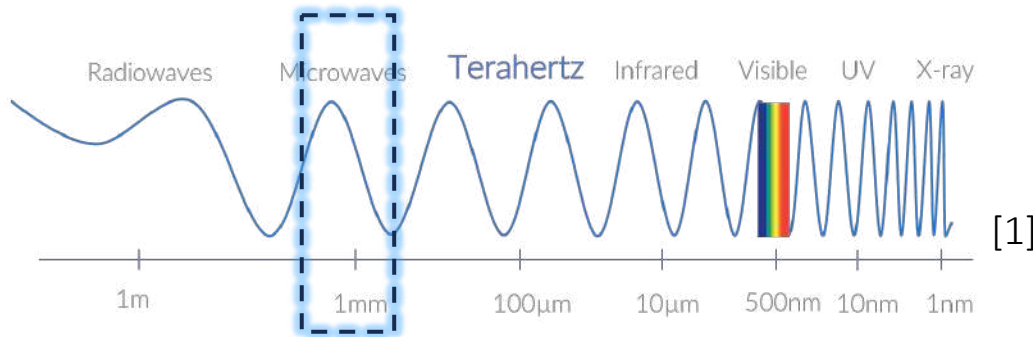
Current Research Topic

- Key Performance Indicators (KPIs) for beyond 5G and 6G:



- Extreme data rate
- Extreme low latency
- Massive connectivity
- Ultra energy efficiency

- Higher frequency resource:



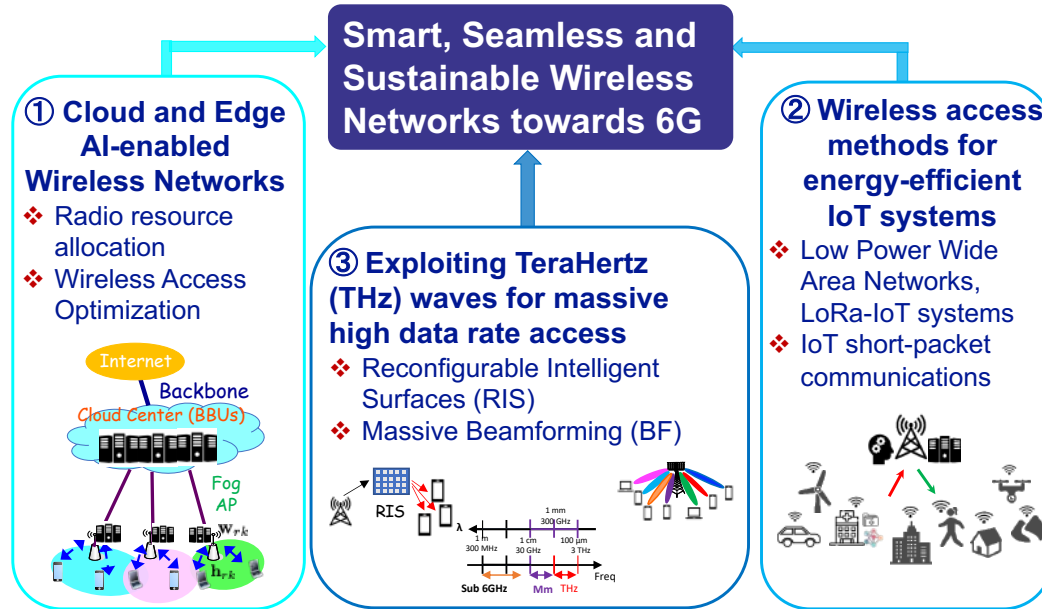
Terahertz waves:

- 0.1 – 10 THz
- 1Tbps = 50 x 20Gbps!
- 30GHz = 75 x 400MHz!

Achieve energy-efficient massive multi-user THz wireless communications

Our Laboratory Kaneko Lab.

- Overview of Research Activities:



- Lab members: 1 professor, 1 post-docs, 3 Ph.D. students, 1 Interns, (6 Interns last year)



Sokendai Lectures

- **Scientific Presentation (1)**
- **Scientific Writing (1)**

To improve skills in orally presenting one's research in English, and writing research paper in English.

- **Information and Communication Systems (2)**

To understand the various aspects of information and communication systems, and study advanced topics in wired and wireless networks.

- **Control Theory and Optimization (2)**

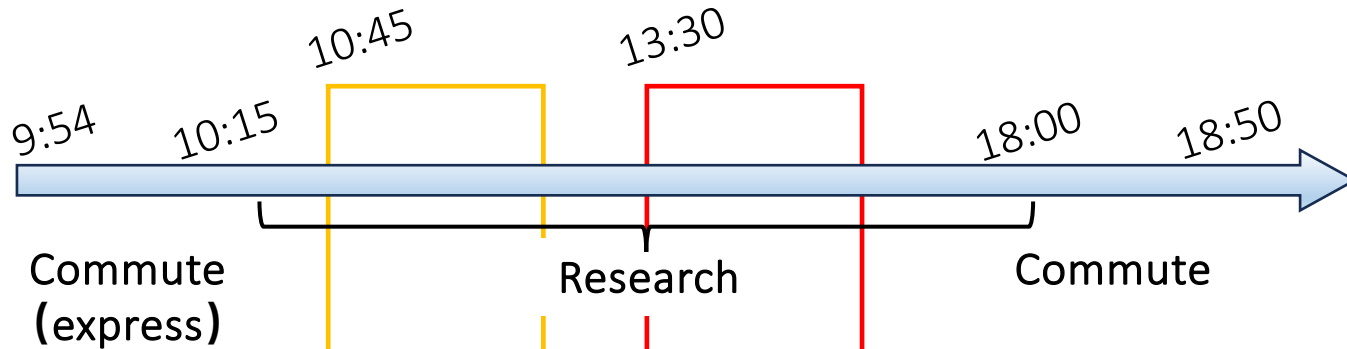
To learn the basics of control theory and optimization.

- **Data mining (2)**

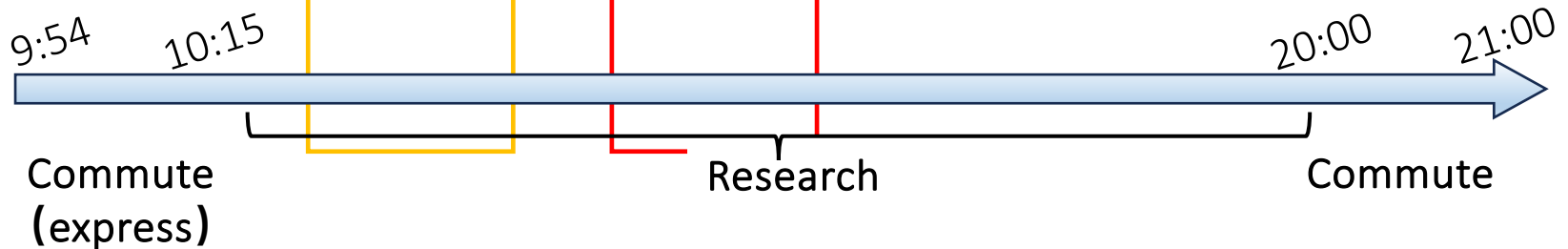
To understand and implement basic data mining algorithms.

Daily Schedule

- Not busy days:



- Busy days:



Experience Abroad

First presentation at the international top conference IEEE Globecom:

Jiali WANG and Megumi KANEKO, “User Grouping and Switch Network Optimization for Energy-Efficient Multi-User Terahertz Communications,” IEEE Globecom, pp. 5799-5804, 2023.



Petronas Twin Towers

How to Recharge?



Message to Students

- Choose the field you really like
- Keep communicating with your supervisor
- Don't be afraid to ask questions and express different ideas
- Stay in touch with family regularly
- Learn Japanese (for foreigner)!