Center for Integrated Underwater Observation Technology

[Fusion of Ocean Cyber and Physical Systems]

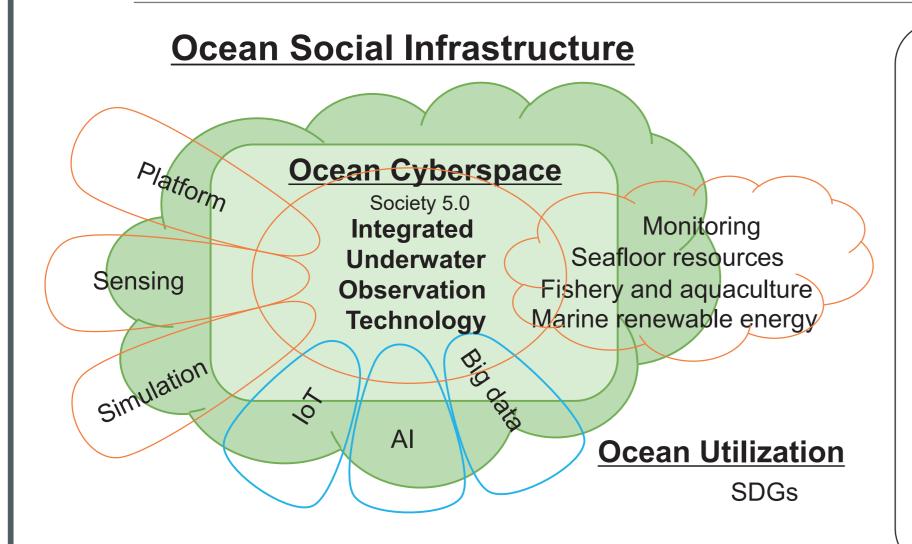
Graduate School of Frontier Sciences; Ocean Technology, Policy and Environment Graduate School of Engineering; Systems Innovation, Mechanical Engineering,

Electrical Engineering and Information Systems, Information and Communication Engineering

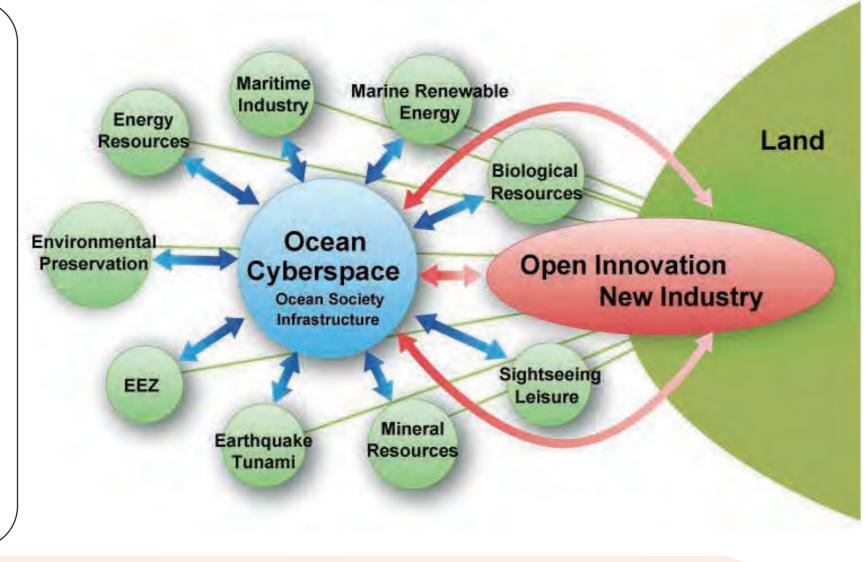
Graduate School of Interdisciplinary Information Studies; Interdisciplinary Information Studies

http://seasat.iis.u-tokyo.ac.jp/

Toward the Construction of Ocean Social Infrastructure



Based on integrated underwater observation technology, we aim to create an ocean cyberspace (virtual space) that is integrated with the physical space of the ocean (real space) and is free from the restrictions of access difficulties by incorporating IoT, artificial intelligence (AI), and big data technology.



Ocean Cyber-Physical System

Optical fiber ultrasonic sensor for

structural health monitoring

OKABE Yoji Lab. Structural Health Diagnostics

OISHI Takeshi Lab.

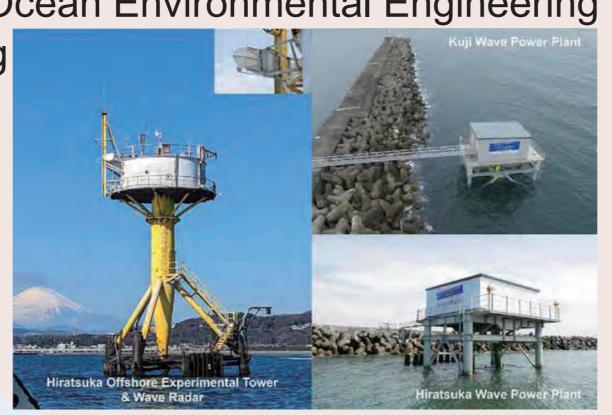
Spatiotemporal Media Engineering

Ultrasonic damage detection

in composite structures

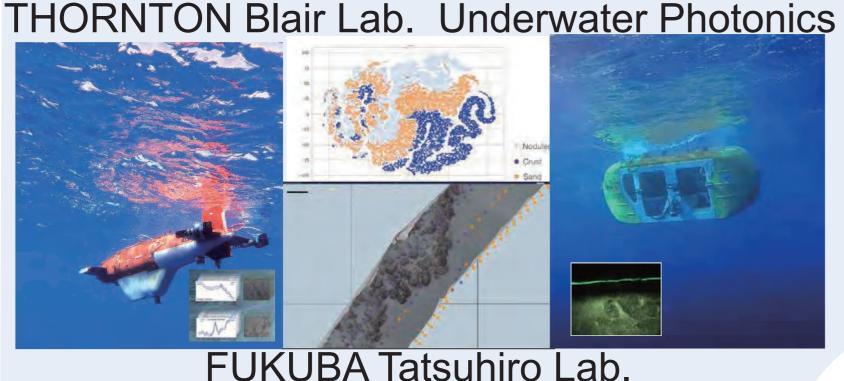
Ocean Sensing System KAWAGUCHI Katsuyoshi Lab.

RHEEM Chang-Kyu Lab. Ocean Environmental Engineering Multidisciplinary Seafloor Observatory Engineering

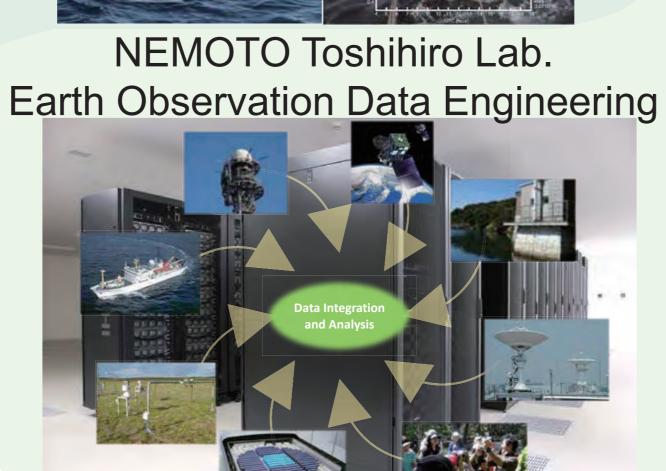


MAKI Toshihiro Lab. Underwater Platform Systems

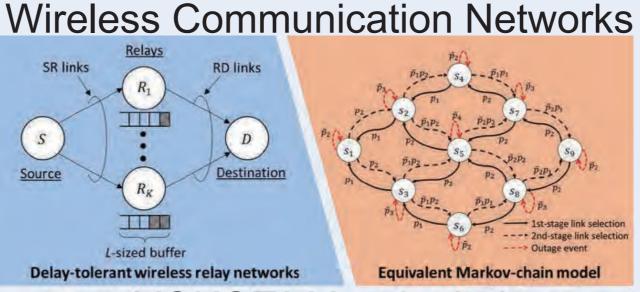
Sea Ice Mapping **Autonomous Navigation**



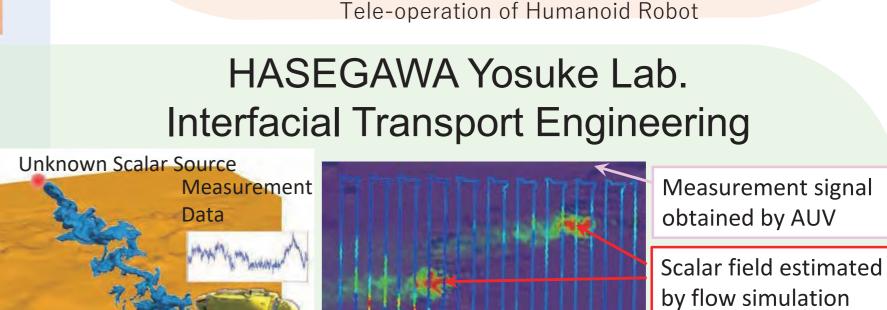
FUKUBA Tatsuhiro Lab. Multi-modal Ocean Sensing Systems Microfluidics for Oceanography



SUGIURA Shinya Lab.

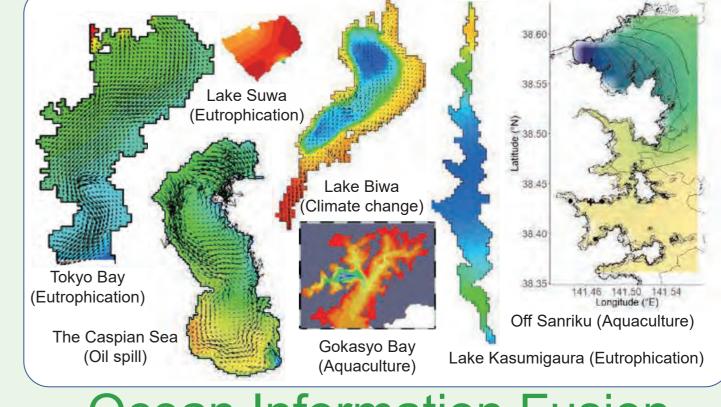


YOKOTA Yusuke Lab. **Underwater Information System**



Estimation of Scalar Field through Integration of Measurement Data into Computational Fluid Dynamics

KITAZAWA Daisuke Lab. Marine Ecosystem Engineering



Ocean Information Fusion

