## 233<sup>rd</sup> WPI-IIIS Seminar

## **Cracking neuronal dynamics underlying complex behavior**

Understanding how the brain orchestrates physiological and behavioral responses is a fundamental goal in neuroscience. Neuronal activity and synaptic plasticity are key components that dynamically adapt to internal and external stimuli, and tracking these neural dynamics with high spatiotemporal resolution is essential for uncovering the neural basis of complex behaviors. In this seminar, I will introduce two recent molecular tools designed to visualize active cell ensembles and synaptic dynamics during diverse behavioral states. I will also discuss their applications and future directions potential advancing in neurotechnological approaches for cellular and systems neuroscience.



## Dr. Kenichiro Nagahama

Department of Neuroscience Johns Hopkins University

Date: Tuesday, July 29, 2025 Time: 14:00 – 15:00 Venue: 1F Auditorium, IIIS Building

\*On-site participation only





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