# Symposium on Topotronics for the Metaverse

Tokyo Institute of Technology, August 9th 2022



## Scientific Program

Masaya Notomi (Tokyo Institute of Technology): Reconfigurable Topological Nanophotonics

Xiao Hu (WPI-MANA, NIMS): Towards semiconductor topological photonics

Shuichi Murakami (Tokyo Institute of Technology): Topological materials towards novel spintronic applications

Stewart Barnes (University of Miami): The Spin Berry Phase and Emergent Inductor-Capacitor-Resistance circuits

Pham Nam Hai (Tokyo Institute of Technology): Topological materials for ultralow power spintronic devices

Masaaki Tanaka (University of Tokyo): Renaissance of ferromagnetic semiconductors and their applications to spintronics and topological electronics

Le Duc Anh (University of Tokyo): Topological Dirac Semimetal  $\alpha$ -Sn: A new platform for topological quantum physics and devices

### Special talk

Christiane Kolla Barnes (Special guest): Switzerland, a unique political system

## Symposium on Topotronics for the Metaverse

Tokyo Institute of Technology, August 9<sup>th</sup> 2022 South 9<sup>th</sup> building- Room 605

13:30: Reception

13:50: Welcome

14:00: Masaya Notomi (Tokyo Institute of Technology)

Reconfigurable Topological Nanophotonics

14:30: Xiao Hu (WPI-MANA, NIMS)

Towards semiconductor topological photonics

15:00: Shuichi Murakami (Tokyo Institute of Technology)

Topological Materials towards novel spintronic applications

15:30: Stewart Barnes (University of Miami)

The Spin Berry Phase and Emergent Inductor-

Capacitor-Resistance circuits

### Special talk

16:00: Christiane Kolla Barnes (Special guest)

Switzerland, a unique political system

16:30: Pham Nam Hai (Tokyo Institute of Technology)

Topological materials for ultralow power spintronic devices

17:00: Masaaki Tanaka (University of Tokyo)

Renaissance of ferromagnetic semiconductors and their applications to spintronics and topological electronics

17:30: Le Duc Anh (University of Tokyo)

Topological Dirac Semimetal a-Sn: A new platform for

topological quantum physics and devices

18:00: Discussion