



83rd RAP Seminar

The 83rd Seminar on RIKEN Center for Advanced Photonics

Language: Japanese

Date: **July 21 (Fri), 16:20 - 17:20, 2023**

Location: **1F Seminar Room, Sendai Campus, RIKEN**
(理研 仙台地区 1階セミナー室)

(TV Relay: Wako Campus: W319, Cooperation Center, RIKEN)
(和光: 研究交流棟3階会議室 W319 (TV会議))

Title: **Photonic integrated circuit devices for quantum information processing**

量子情報処理のための光集積回路デバイス

Speaker: **Prof. Nobuyuki MATSUDA**

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Quantum computers is a computer that extracts the outcome of a target computing task with a high probability utilizing the properties of quanta such as quantum superposition and entanglement. Optical-waveguide-based integrated photonics technologies have proven useful for the development of quantum computers using photons. In this talk, we introduce our silicon- or silica-based waveguide-based devices that realize the generation and manipulation of quantum states of light on a chip.