## 電気情報工学科 Lecture Series 2018

Time and Venue: 6月21日(木)17:00 中講義室

Lecturer: 仕幸 英治 先生



**Title:** Spin-Pumping-Induced Spin Transport in Solid State Materials at Room Temperature (スピンポンピングを用いた固体材料の室温スピン輸送)

**Abstract:** Pure spin current, which is a flow of spin angular momenta, is dissipation-less information propagation in electronic devices. In spintronics, to evaluate the spin transport properties in various materials is one of the issues for the practical use. Recently, the lecturers have demonstrated the spin transport in the p-type silicon (Si) at room temperature (RT) by using a dynamical spin-injection method, "the spin-pumping", and by using an electrical spin-detection method, "the inverse spin-Hall effect." Similarly to the p-Si experiment, the spin transport in other solid state materials, for example, aluminum, graphene, and pentacene films, was achieved at RT. The details are introduced in this seminar. (This lecture will be given in Japanese.)

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