



スピントロニクス国際共同大学院セミナー (GP-Spin Seminar)

日時：2016年 2月10日(水) 13:00~15:00

場所：工学研究科マテリアル・開発系 教育研究棟
セミナー室2 (4F 407室)

講演者：Dieter Weiss 教授 (ドイツ レーゲンスブルク大学 物理学科)

講演題目：Introduction to electrical spin injection and detection

本件問い合わせ先：新田 淳作 (内線：7315)

[Abstract]

Introduction to electrical spin injection and detection

Dieter Weiss

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In the focus of my lecture is spin-injection and detection in semiconductors. I will introduce basic concepts like spin-orbit interaction, the paradigmatic Datta-Das spin transistor and the standard model of spin injection. On the experimental side I will mainly concentrate on spin-dependent transport experiments and especially on non-local transport in ferromagnet-semiconductor hybrid structures involving the ferromagnetic semiconductor (Ga,Mn)As. Besides spin-injection (and detection) in bulk GaAs, spin injection into two-dimensional electron systems and-if time permits-into graphene will be on the agenda.