

15:00 – 16:30
Thursday
12th Feb.

Micromagnetic properties

Magnetic stiffness, magnetic anisotropy, dipole interactions
Domains, coercivity
Domain manipulation

15:00 – 16:30
Thursday
19th Feb.

Nanomagnetism

Stoner–Wohlfarth astroid
Molecular magnets
Macroscopic quantum tunneling

15:00 – 16:30
Thursday
26th Feb.

Magnetoresistance effects

Anisotropic magnetoresistance
Planar Hall effect
Anomalous Hall effect
Giant magnetoresistance
Tunnel magnetoresistance

15:00 – 16:30
Thursday
5th Mar.

Magnetization manipulation

Electric current
Electric field
Light



Prof. Tomasz Dietl

Institute of Physics,
Polish Academy of Sciences
Institute of Theoretical Physics,
Warsaw University
WPI-AIMR, Tohoku University



Graduate Program in Spintronics

Introduction to Magnetism and Spintronics

Second series



All the lectures will be held at:

Room A401

**Laboratory for Nanoelectronics
and Spintronics, RIEC
Katahira campus**