



Contribution ID: 73

Type: **Talk**

【811】 Magnetic domain walls –from basics to applications

Thursday 30 August 2018 14:00 (30 minutes)

The textbook magnetic domain wall is a very simple object: Its shape and width are described by a few material properties only. In nanostructures, however, the situation is different. By high-resolution imaging we observe complex spin arrangements that strongly deviate from those commonly encountered in magnetic films or bulk ferromagnets, for in-plane as well as perpendicularly magnetized systems. Wall profiles and even wall types can be tailored by geometry, such as wire width or constrictions. Dzyaloshinskii-Moriya exchange interaction is another parameter to modify a domain wall. We will discuss whether and how these extra handles can be exploited for spintronics applications, such as sensors or storage and memory concepts.

Author: Dr ALLENSPACH, Rolf (IBM Research - Zurich)

Presenter: Dr ALLENSPACH, Rolf (IBM Research - Zurich)

Session Classification: Magnetism and Spintronics at the Nanoscale

Track Classification: Magnetism and Spintronics at the Nanoscale