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【105】Directly imaged non-standing spin-waves in rectangular microstrips under uniform excitation

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In this contribution we present direct imaging of spin-wave dynamics in $Ni_{80}Fe_{20}$ rectangular microstrips ($5 \times 1 \times 0.03\ \mu m^3$) under uniform excitation. Both a single strip and two strips of the same size oriented perpendicular to each other are investigated. For FMR and time-resolved STXM measurements a static magnetic field is applied in plane, aligned parallel or perpendicular to the longer side of the strips. The measurements confirm that quasi-uniform and spin-wave excitations can be observed in these geometries. Increasing the static magnetic field allows to observe the spin-waves at resonance fields and their superposition off resonance. A non-standing character of spin waves under uniform excitation is reported. Financial support by FWF (P.Nr.:I-3050).

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