

SPIN MODES IN SATURATED ELLIPICAL DOTS

F. Montoncello^a, L. Giovannini^a, F. Nizzoli^a, G. Gubbiotti^b, G. Carlotti^c,
T. Okuno^d, and M. Grimsditch^e

^aDipartimento di Fisica, Università di Ferrara, via del Paradiso 12 - 44100 Ferrara,
Italy

^bIstituto Nazionale per la Fisica della Materia, Unità di Perugia, Via A. Pascoli,
I-06123 Perugia, Italy

^cDipartimento di Fisica, Università di Perugia, I-06123 Perugia, Italy

^dInstitute for Chemical Research, Kyoto University, Uji 611-0011, Japan

^eMaterials Science Division, Argonne National Laboratory, Argonne, IL 60439, USA

9.7 cm

Brillouin light scattering spectra have been measured in arrays of permalloy elliptical dots 15 nm thick, with major and minor axes 500 and 200 nm long. A magnetic field of fixed magnitude (1.5 kOe) is applied along the easy and the hard axis. Several peaks are resolved in both configurations. They are interpreted within the framework of the recently introduced dynamical matrix model, in terms of modes localized at the dot ends, or extending throughout the whole dot. Hybridization between these two families is discussed in dependence of the direction of the applied field.

13.4 cm

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Corresponding author :

F. Montoncello

Address for correspondence :

Università di Ferrara, Dipartimento di Fisica
via del Paradiso 12 - I-44100 Ferrara, Italy

Email address :

montoncello@fe.infn.it