# In situ multifrequency ferromagnetic resonance F. M. Römer<sup>a</sup>, K. Wagner<sup>a</sup>, R. Narkovic<sup>b</sup>, H. Zähres<sup>a</sup>, R. Meckenstock<sup>a</sup>, J. Lindner<sup>a</sup>, M. Farle<sup>a</sup>

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Frequency and angular dependent ferromagnetic resonance (FMR) measurements were done in ultrahigh vacuum (p  $< 1 \cdot 10^{-10}\,\mathrm{mbar}$ ) on an uncapped 10 nm Fe/GaAs(011) film. As probe we used a coaxial semi rigid microwave cable, which is hot-wired at the end. We evaluated the anisotropy parameters and were than able to determine the Landé g-factor along all the primary crystallographic directions [100], [110] and [111], due to the fact, that for the GaAs(011) orientated crystal all primary direction lay in the film plane.

We will present our setup, the results of those measurement and the calculations of the high frequency field distribution of our probe.

\_\_\_\_\_\_ 13.4 cm —\_\_\_\_\_

## Subject category:

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 $9.7~\mathrm{cm}$