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Thickness Dependency of Ferromagnetic Domains in CoPt Multilayers NATHAN GAY, KARINE CHESNEL, BYU, OLAV HELLWIG, Hitachi GST — Ferromagnetic materials have been providing and still provide large potential technological interests, especially in the data storage industry. As first evidenced by L. Neel and F. Bloch, when the material is formed as a thin layer and exhibits a perpendicular easy magnetization axis, magnetic domains form in the nanometric scale with magnetic moments pointing alternatively in and out perpendicularly to the layer. In this work, we study the influence of the film thickness on the domain size and morphology in Co/Pt multilayers. We performed this study by using Magnetic Force Microscopy (MFM), a tool allowing the imaging of magnetic domains morphology through the interaction between a sharp magnetic probe and the stray field emanating form the surface of the sample.

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