Numerical simulation of magnetic domain evolution in Co/Pd thin films DANIEL PARKS, Department of Physics, University of Oregon, SUJOY ROY, Advanced Light Source, Lawrence Berkeley National Laboratory, KEOKI SEU, Department of Physics, University of Oregon and Advanced Light Source, Lawrence Berkeley National Laboratory, RUN SU, Department of Physics, University of Oregon, ERIK SHIPTON, ERIC FULLERTON, Electrical and Computer Engineering, University of California, San Diego, STEPHEN KEVAN, Department of Physics, University of Oregon — We report on the development of a novel algorithm for the numerical simulation of two-dimensional magnetic domain patterns. By allowing an arbitrary function to act as a constraint on the envelope of the fourier modulus of the simulated domain pattern, we are able to use experimentally observed scattering patterns to guide the evolution of the simulation. Here we show the results of simulations on magnetic domain growth in Co/Pd thin films.

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