Postdoctoral researcher position

We are looking for a postdoctoral researcher to work on a project within the Spin-Electronics Group at the National Institute of Standards and Technology (NIST) in Boulder, Colorado. The position is open to US and non-US citizens. Our project is focused on relating magnetic materials parameters to magnetic random access memory (MRAM) performance metrics such as write error rates and thermal stability. We will be extending our measurement capabilities to determine the Heisenberg exchange from measurements of the spin-wave dispersion curve with Brillouin Light Scattering and conduct high-speed electrical measurements of device performance. This project will be carried out in close collaboration with the microelectronics industry. A very important component of the project is to inform and improve models to ultimately predict device performance based on wafer level measurements.

Preferred but not required experiences include:

- PhD degree in physics, material science or related field.
- Experience in analyzing larger data sets with Python, Matlab or other programming languages.
- Measurement of magnetization dynamics via optical or electrical means including characterization of spin- or spin-orbit torque.
- Experience in micromagnetic simulations of magnetization dynamics.
- Building or modifying measurement systems, including detailed CAD design

Please contact:

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