

Abstract Submitted
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Dynamical magnetic excitations in adatoms and dimers on metallic surfaces¹ SAMIR LOUNIS, Peter Grünberg Institut and Institute for Advanced Simulation, Forschungszentrum Jülich, ANTONIO T. COSTA, ROBERTO B. MUNIZ, Instituto de Física, Universidade Federal Fluminense, 24210-340 Niterói, RJ, Brazil, DOUG L. MILLS, Department of Physics and Astronomy, University of California Irvine, Irvine, California, 92697 USA — There is hardly any method which has shaped nanoscience and nanotechnology more profoundly than the scanning tunneling microscope. Such a tool is used nowadays to probe spin-excitations in nano-objects[1,2,3,4]. A key quantity describing these excitations is the transverse dynamical magnetic susceptibility that we calculate using the Korringa-Kohn-Rostoker Green function method within the framework of time-dependent density functional theory[5]. The behavior of adatoms and dimers will be discussed and comparison to experimental works will be provided when available.

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Samir Lounis
Peter Grünberg Institut and Institute for Advanced Simulation,
Forschungszentrum Jülich

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