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Cu Nuclear Magnetic Resonance Intensity Reduction in Electron-Doped Superconducting Cuprates

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A temperature-dependent nuclear magnetic resonance (NMR) intensity reduction or wipe-out is best known in the hole-doped high temperature superconducting cuprates (HTSCs) [1,2]. It has been attributed to a slowing down of the spin and charge fluctuations. We have recently shown that a temperature-dependent reduction in the Cu NMR intensity is also observed in the electron-doped HTSCs, $\text{Pr}_{2-x}\text{Ce}_x\text{CuO}_4$ and $\text{Sr}_{0.9}\text{La}_{0.1}\text{CuO}_2$ for less than 0.13 doped electrons per Cu [3,4]. In this talk we report the results from recent measurements on the pure compounds as well as Ni-doped samples.

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Voditelj seminara FO

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