

# **Evidence of vortex-line recoupling in irradiated Bi-2212 from transport measurements**

N. Morozov, M.P.Maley and L.N. Bulaevskii

*MST-STC, Los Alamos National Laboratory, Los Alamos, NM 87545, USA*

## **Abstract**

We studied c-axis magnetoresistance in irradiated Bi-2212 single crystals and discovered a nonmonotonic behavior of  $\rho_c$  as a function of applied field. The irradiation density, temperature and angular dependencies of the observed phenomenon indicate that the recoupling of pancake vortices into vortex lines takes place in a corresponding range of the experimental conditions. Our measurements allowed us to find the borders of the vortex-line phase on the B-T phase diagram.