Hall conductivity and colossal magnetoresistance in FeSb$_2$¹
RONGWEI HU, Condensed Matter Physics, Brookhaven National Laboratory, VESNA MITROVIC, Physics Department, Brown University, CEDOMIR PETROVIC, Condensed Matter Physics, Brookhaven National Laboratory — We report the anisotropic Hall conductivity and discuss mechanism of colossal magnetoresistance in Co doped FeSb$_2$. The Hall conductivity is described in a mutli-carrier picture, in which large carrier mobility was found in Co doped FeSb$_2$.

¹Work supported by the office of Basic Energy Sciences US Department of Energy.