

Abstract Submitted  
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**Nuclear relaxation rate in d+s wave superconductor** KESHAV SHRIVASTAVA, University of Hyderabad — The s and d wave type gap symmetries yield distinctively different results for the temperature dependence of the nuclear relaxation rate. We have calculated the nuclear relaxation rate for various amounts of s and d wave admixtures in the gap of the superconductors. It is found that the calculated values of the nuclear relaxation rate for 80% d wave and 20% s wave are in good agreement with the experimental measurements in 123, 124 and 247 type superconductors. Thus we find that the order parameter has mixed s+d character in the superconductors. There are several possibilities of symmetries when two gaps are taken into account such as in MgB<sub>2</sub>. 1. K. N. Shrivastava, Superconductivity: Elementary topics, ISBN 981-02-4451-7, World ci. (2000)

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