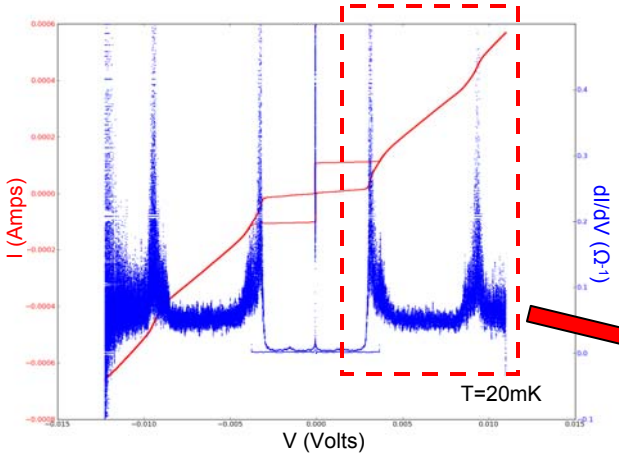
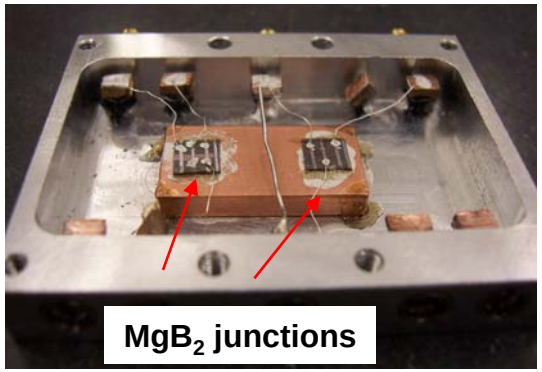
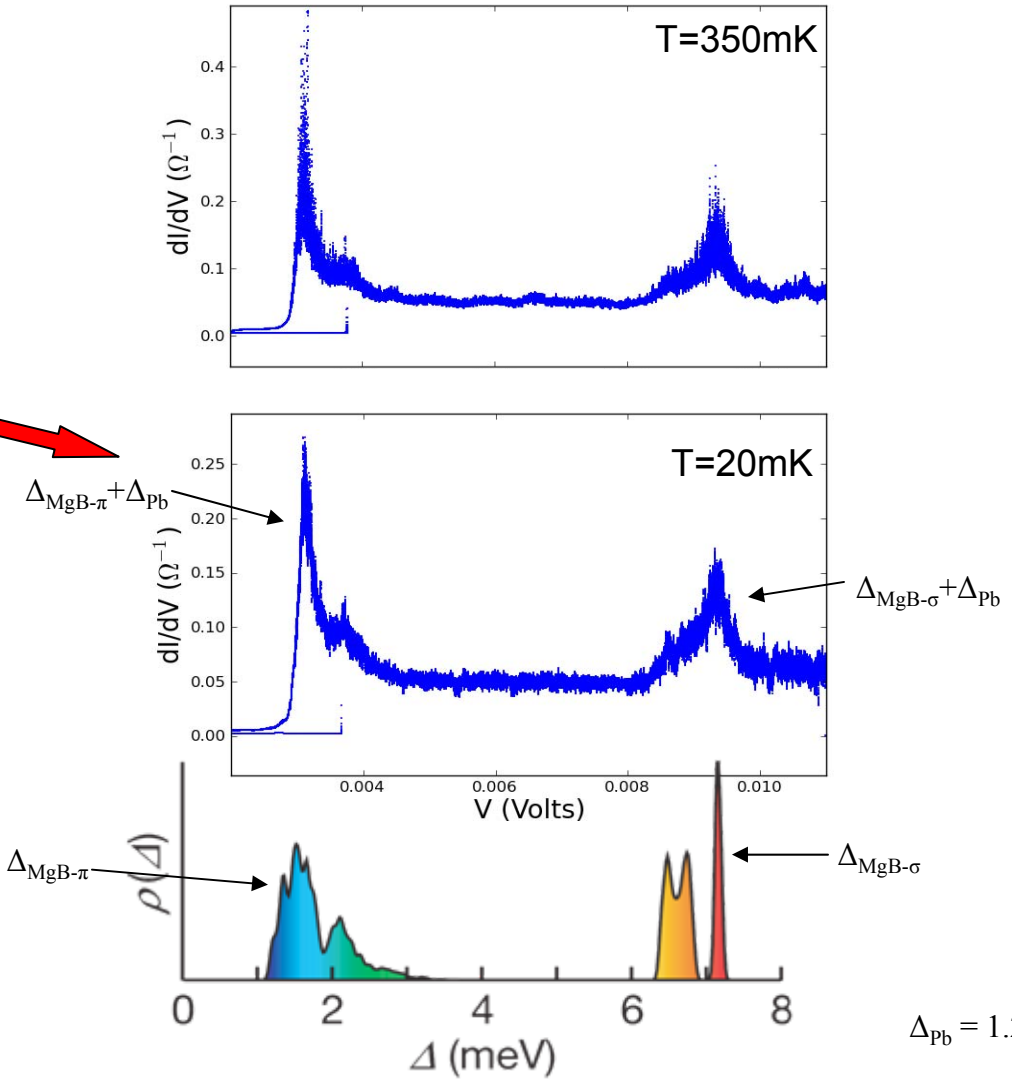
New Data from Drexel (*Ramos) Group: Structure in Differential Conductance Peaks (sub-gap structure) in MgB2 junctions, as predicted by Choi, *et al.*





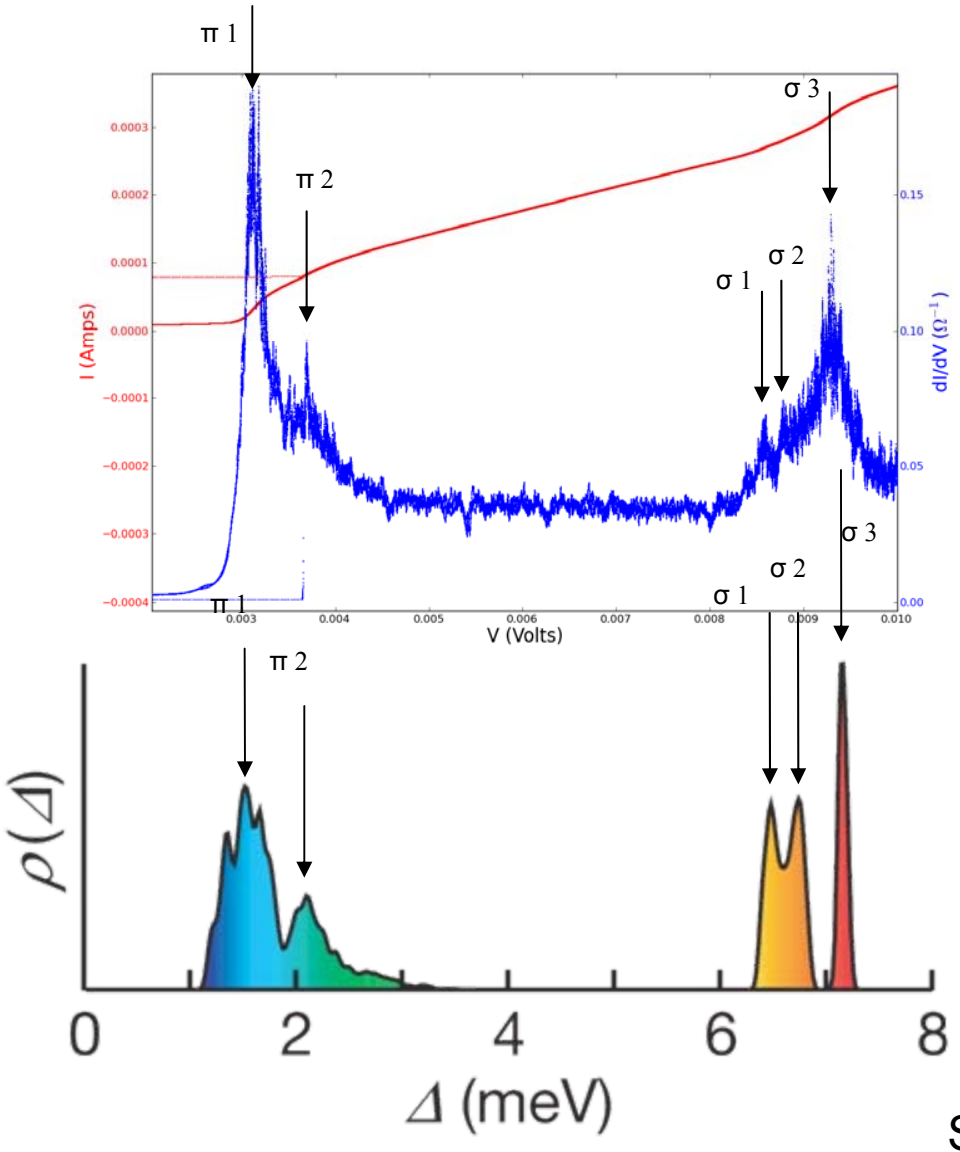


Δ_{Pb} = 1.25 meV

Theoretical Prediction by H. J. Choi, D. Roundy, H. Sun, M. L. Cohen, and S. G. Louie, Nature 418, 758 (2002)

* http://www.physics.drexel.edu/research/lowtemp /

Our Data agrees reasonably well with theory !



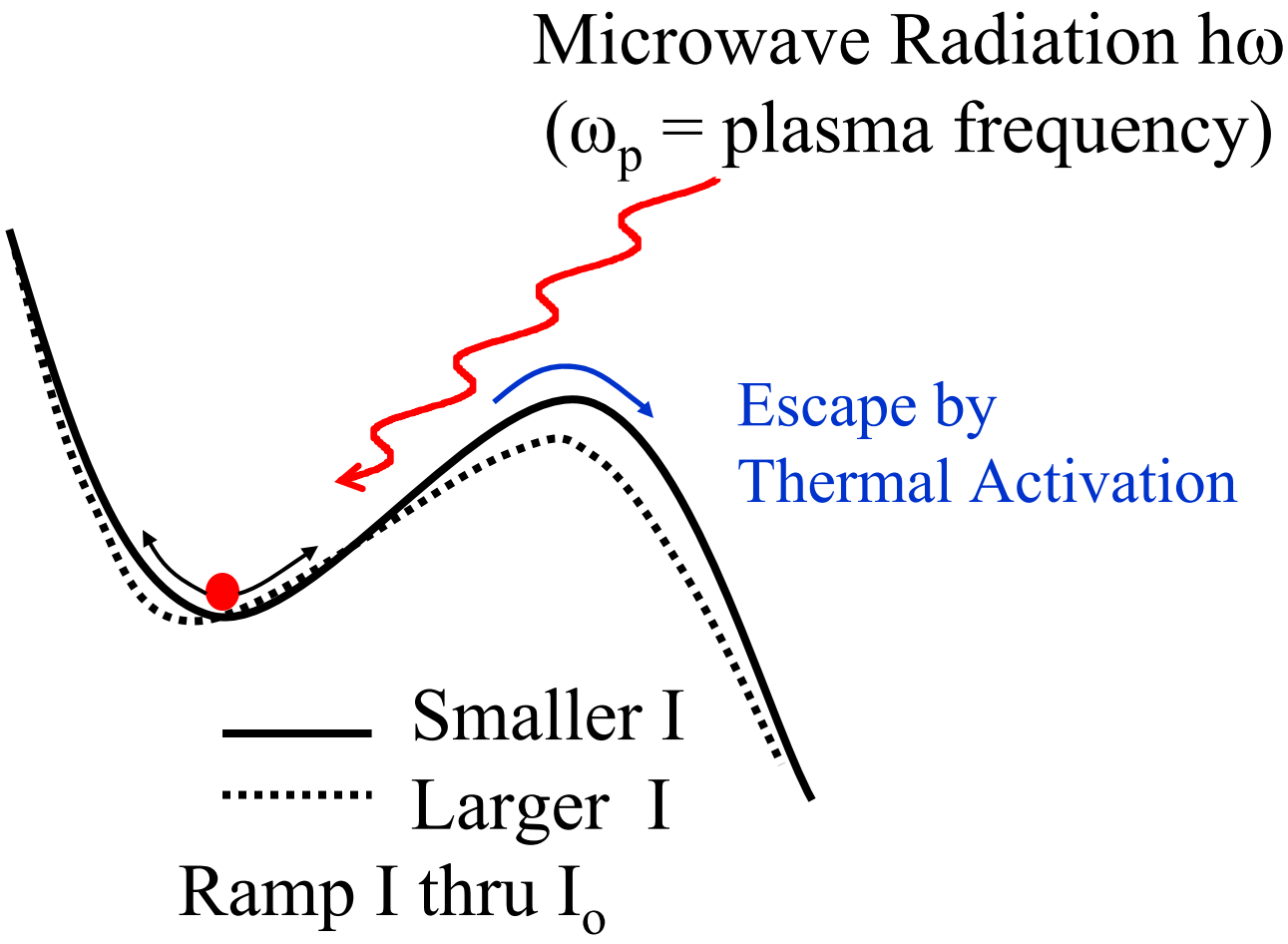
Drexel Data
dI/dV – V

Presented
at
APS March Meeting Session X41-11

Prediction of peak structure of MgB_2 sub-gap from UC Berkeley Group

Samples obtained from Profs. Xiaoxing Xi and Ke Chen(Temple U)

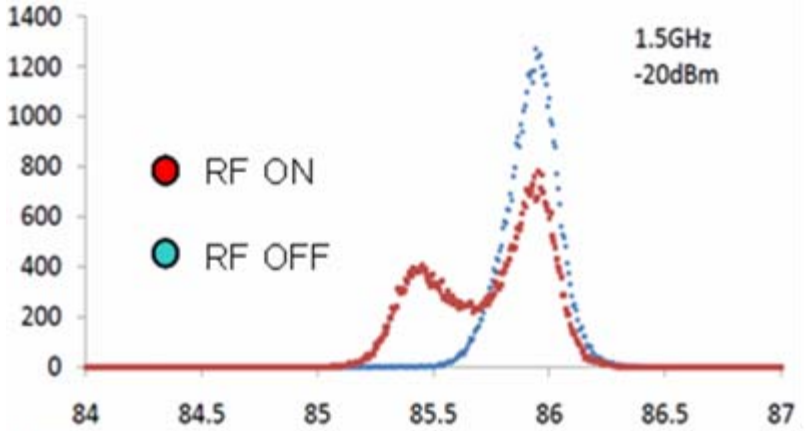
Microwave Resonant Activation

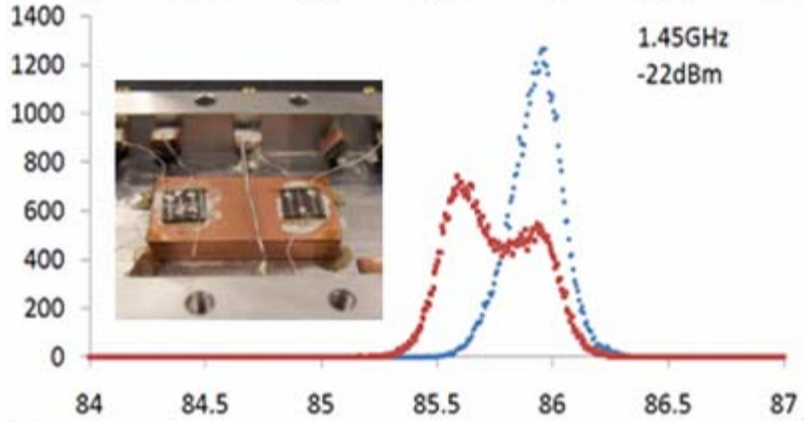


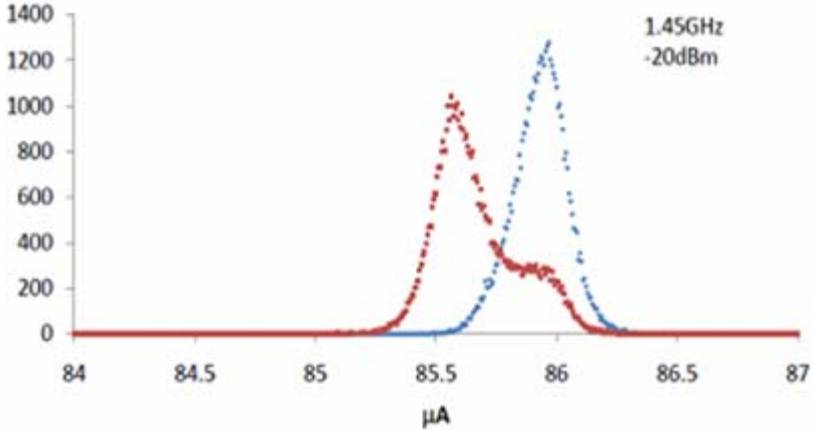
Expect Enhancement of Escape Rates at resonance,

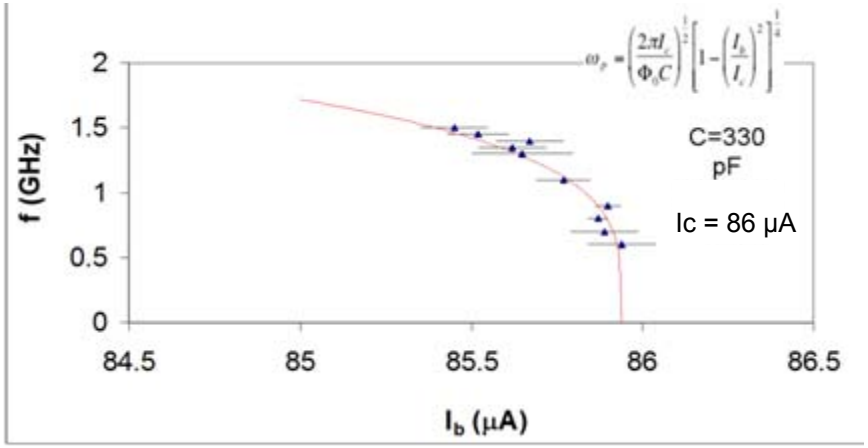
($\omega_{microwaves} = \omega_p$)

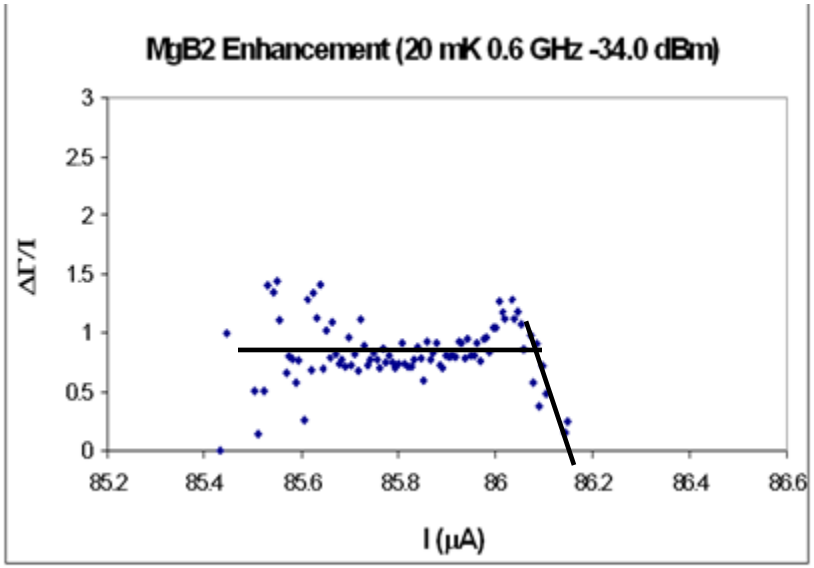
Microwave Resonant Activation of MgB_2 Junctions











Enhancement looks "classical".