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Measrement of Electron Impacat Excitation Cross Sections of n = 3-1 Transitions in Heliumlike Kr^{34+} A.J. SMITH, Morehouse College, Atlanta, GA 30314, H. CHEN, Lawrence Livermore National Laboratory, Livermore, CA 94550, D. THORN, LLNL, P. BEIERSDORFER, LLNL, MOREHOUSE COLLEGE WITH LLNL COLLABORATION — We have measured the ratio of electron impact excitation cross sections for the intercombination line 1s3p $^3P_1$ - $1s^2$ $^1S_0$ and the resonance line 1s3p $^1P_1$ - $1s^2$ $^1S_0$ in heliumlike Kr^{34+} at relativistic electron beam energies. The lines are excited in the Lawrence Livermore National Laboratory's electron beam ion trap (EBIT-1) operated in the high energy mode, SuperEBIT. X-ray spectra were recorded using a high-resolution microcalorimeter. We present a comparison of the measured ratios and theoretical predictions of these ratios. This work was performed under the auspices of the U. S. Department of Energy by Morehouse College under contract No. DE-FG02-98ER14877 and by LLNL under contract No. W-7405-ENG- 48. We gratefully acknowledge support by the LLNL Research Collaborations Program for HBCU's.

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