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Measurement of the Spectral Distribution of Low Energy Electrons Emitted as a Result of $M_{2,3}VV$ Auger Transitions in Cu(100) and the $N_{2,3}VV$ transition in Ag[1] PRASAD JOGLEKAR, SUMAN SATYAL, KARTHIK SHASTRY, Dept of Physics, University of Texas at Arlington, STEVEN HULBERT, NSLS, Brookhaven National Laboratory, ALEXANDER WEISS, Dept of Physics, University of Texas at Arlington — Auger Photoelectron Coincidence Spectroscopy (APECS) was used to investigate the physics of electron emission in the Low Energy Tail (LET) of the MVV and NVV Auger spectra obtained from Cu(100) and Ag(100) surfaces, respectively. A beam of 200eV photons (180 eV in the case of Ag) was used to probe the Cu (Ag) sample. Two Cylindrical Mirror Analyzers (CMAs) were used to select the energy of electrons emitted from the sample. Auger electrons were detected in coincidence with the $3p_{3/2}$ photoemission peak in the case Cu and the 4p photoemission peak in the case of Ag. A set of coincidence measurements were made with the fixed analyzer set at a series of energies between the core and the valence band in order to obtain an estimate of the background due to the inelastic scattering of the valence band electrons. This background was then subtracted yielding a spectrum consisting only of electrons emitted as a result of the Auger transition process.

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