

HIGH RESOLUTION VELOCITY MAP IMAGING PHOTOELECTRON SPECTROSCOPY OF THE BERYLLIUM OXIDE ANION, BeO^-

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The photodetachment spectrum of BeO^- has been studied using high resolution velocity map imaging photoelectron spectroscopy. The vibrational contours were imaged and compared with Franck-Condon simulations for the ground and excited states of the neutral. The electron affinity of BeO was measured for the first time, and anisotropies of several transitions were determined. Experimental findings are compared to high level *ab initio* calculations.