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Interpreting the magnetic and electric deflections of free metal clusters in molecular beams ANTHONY LIANG, JOHN BOWLAN, WALTER DE HEER — A short review of the analysis of magnetic and electric deflection data will be presented. Electric and magnetic beam deflection of several metal clusters, including Au_N, Al_N, Nb_NO, Na_N, Ho_N, Co_N, Rh_N at various temperatures (20K-300K) and field strengths will be presented. The relation between the broadening of the deflected beam and the polarization distribution of the ensemble assuming a classical polar spherical rigid rotor model is demonstrated. Complicating factors including asymmetry effects and residual temperature effects will be discussed.

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