1014-26-815 Nasser Dastrange\* (dastrange@bvu.edu), Department of Mathemtics, Buena Vista University, Storm Lake, IA 50588. A Comparison of Newton's Interpolation Theory and the Mean Value Theorem of Calculus. Preliminary report.

In this talk we shall give a brief survey of the results in the theory of interpolation. In particular, we establish connections between Newton's divided differences and the mean value theorem of calculus. More recent research, conjectures, and examples will be presented. (Received September 24, 2005)