Reciprocal Polynomial Extrapolation

An alternative to the classical extrapolations is proposed. The stability and the accuracy are studied. The new extrapolation behaves better than the classical ones when there are problems of stability. This technique will be useful in those problems where the region of stability is very small and it forces to work with too fine scales.

Key Words. Extrapolation, stability, ODE's

AMS(MOS) subject classifications. 65B05, 65D05, 65L20