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George A. Anastassiou* (ganastss@memphis.edu), Department of Mathematical Sciences,
University of Memphis, Memphis, TN 38152. *Fractional Inequalities Revisited*. Preliminary report.

In this work we use primarily the Caputo fractional derivative, as the most important in applications, and we present first fractional differentiation inequalities of Opial type where we involve the so called balanced fractional derivatives. We continue with right and mixed fractional differentiation Ostrowski inequalities in the univariate and multivariate cases. Then we present right and left, as well as mixed, Landau fractional differentiation inequalities in the univariate and multivariate cases. The inequalities are given for various norms. (Received August 25, 2011)