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Paul R Wolfson* (pwolfson@wcupa.edu), Department of Mathematics, West Chester University, West Chester, PA 19383. *Newton, Leibniz—what’s the difference?* Preliminary report.

It is generally agreed that the calculus of Newton begins with the concept of continuous motion; his fluxions measure the rate of that motion. By contrast, Leibniz’s calculus begins with discrete sequences and the change between terms is measured by their difference. These different approaches to many of the same problems reflect a difference in philosophy of mathematics, one which in Newton’s case had developed over two decades. I shall try to describe that philosophy and show why it caused Newton to resist the calculus of differentials, which was so appealing to the most prominent of his contemporaries. (Received January 05, 2015)