1067-Z1-1910 Eugene C. Boman* (ecb5@psu.edu). Fixing Fluxions: Benjamin Robins' response to Berkeley's "The Analyst".

In a treatise titled "The Analyst" published in 1734 Bishop George Berkeley attacked the foundations of what we now call Calculus. The initial responses, from James Jurin and J. Walton were angry and antagonistic in tone, especially Jurin's.

Later, when cooler heads prevailed, several mathematicians attempted to present Newton's Method of Fluxions rigorously and to address the difficulties Berkeley had identified. One of the earliest was Benjamin Robins's "A Discourse Concerning the Nature and Certainty of Sir Isaac Newton's Method of Fluxions and of Prime and Ultimate Ratios". I will present and examine some key passages from Robins' treatise. (Received September 22, 2010)