Brenda Davison* (bdavison@sfu.ca), 8888 University Drive, Burnaby, B.C. V5A 1S6, Canada.

The Influence of the 1856 Stokes Paper on the Mathematics of Divergent Series. Preliminary report.

In a paper published in 1856, G.G. Stokes (1819-1903) introduced, via three examples, a method of using divergent series in order to quickly compute the values of convergent integrals. This talk will examine who reponded to this paper in the years immediately following its publication. And which physicists and/or mathematicians adopted this method and what problems that allowed them to solve. The fact that divergent series, while not rigorously understood at this time, were useful focused attention on them in a manner that made it important to understand how to correctly handle them. (Received September 14, 2020)