1145-01-2173 **Brenda Davison*** (`bdavison@sfu.ca`), 8888 University Dr., Burnaby, B.C. V5A 1S6, Canada.
Divergent Series near the turn of the 20th century. Preliminary report.

While Euler and others of the mid-18th century had methods for assigning a value to some divergent series, the broad adoption of the Cauchy definition for the sum of a series made such objects problematic. However, by the mid-19th century, renewed interest in these series, as a result of their usefulness in physics, appeared at the hands of Stokes and Poincaré. This talk will examine the reasons for renewed interest in divergent series and the mathematics of summability and asymptotic series that developed in the period from 1880 through 1920, at the hands of Borel and Cesàro, among others, as a result. (Received September 24, 2018)