## MR1200063 (93k:01095) 01A80 01A45 01A50 Feigenbaum, Lenore (1-TUFT)

## $\star$ The fragmentation of the European mathematical community.

The investigation of difficult things, 383–397, Cambridge Univ. Press, Cambridge, 1992. Concentrating on the reception and development of the calculus, the author examines the relations between British and Continental mathematicians in the early eighteenth century. Particular attention is devoted to three figures, Brook Taylor, Johann I Bernoulli and Pierre Rémond de Monmort. Taylor was an advocate of Newton, Bernoulli of Leibniz, while Monmort acted as a conciliator between the feuding camps.

The author notes the role that the new calculus played in solidifying the "emergent professional community" of mathematicians at the end of the seventeenth and the beginning of the eighteenth century. She emphasizes, however, the substantial tensions and strains that arose from nationalism and differences of personality. She observes that "one of the greatest challenges for the historian of early eighteenth-century mathematics is to uncover instances of kind and decent behaviour".

The author calls attention to a certain tension that existed between the aging Newton and the young Taylor. Newton once remarked (in connection with the Mint), "I am safest in people that are afraid of me". In 1718 Taylor was pressured by Newton to resign his post as secretary of the Royal Society. He may have found in Taylor a colleague who was at once too able and too independent. Taylor's major treatise *Methodus incrementorum* had appeared in 1715. The author observes the following: "Although the language and notation of Taylor's book were Newtonian, not only did he propose what he considered to be a more sound foundation for the fluxional calculus based on his finite increments, but the subject matter, physical applications, and the analysis he employed were all more characteristic of Continental mathematics." *Craig G. Fraser*