

1096-01-919

Victor J Katz* (vkatz@udc.edu), 841 Bromley St., Silver Spring, MD 20902. *Group Theory and the Bumpy Road to Abstraction*. Preliminary report.

Although the idea of a group was present in the work of Galois in 1830 and was explicitly defined by Arthur Cayley in 1854, it took until late in the nineteenth century before the idea of a group became part of the mathematical mainstream. And even then, groups, especially groups of permutations, were generally thought of simply as useful tools for determining whether polynomial equations could be solved by radicals. In fact, through the end of the century, the central goal of algebra was still, as it had been for centuries, the solving of equations. We will explore in this talk some of the reasons for the long gestation period between the conception of the idea of a group and the birth of the notion that such an abstract concept should serve as the basis for the study of algebra. (Received September 17, 2013)