

962-46-68

John J. Saccoman* (sacomjj@shu.edu), Department of Mathematics & Computer Science, Seton Hall University, 400 South Orange Avenue, South Orange, NJ 07079. *On the Origin of Basic Sequences.*

Bases and basic sequences are fundamental notions in the study of the structure of Banach spaces. However, several aspects of basic sequences are unclear. While G. Hamel is given credit for the origin of the concept of a basis, credit for the origin of the concept of a basic sequence is ascribed to either S. Mazur and/or S. Banach. A review of the literature shows that the origin of a widely used necessary and sufficient condition for basic sequences is obscure. Further, although both Mazur and B. Gelbaum developed procedures for constructing basic sequences, very little is mentioned about the latter's result. The purpose of this talk is to discuss the origin of the concept of a basic sequence, clarify the origination of the necessary and sufficient condition, and determine the roles and compare the procedures of Mazur and Gelbaum for constructing basic sequences. (Received July 18, 2000)