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David Marker* (marker@math.uic.edu), Dept. of Mathematics (M/C 249), University of Illinois at Chicago, 851 South Morgan St., Chicago, IL 60607. *Remarks on Zilber's pseudoexponentiation.*

Although the integers are definable in the complex field with exponentiation, there is still some hope for a reasonable model theory. Zilber has constructed a non-elementary class of algebraically closed fields with exponentiation and shown it is categorical in uncountable cardinalities and has a reasonable definable sets. This leaves the question of whether the complex field is in this class. We will describe several directions of research on this problem. (Received August 17, 2008)