

UIC Model Theory Seminar, March 8, 2005

**The fields of complex and real numbers with a “small”
multiplicative group**

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We axiomatize the theory of structures (K, G) , where K is an algebraically closed or real closed field and G is a “small” multiplicative subgroup of K^\times . We also give a description of definable sets in (K, G) . In order to capture the notion of “smallness”, we introduce the “Mann property” for a multiplicative group of a field.