
MR2721747 (2011k:03070) 03C60 (12L12)**Kirby, Jonathan (4-EANG)****Exponential algebraicity in exponential fields. (English summary)***Bull. Lond. Math. Soc.* **42** (2010), no. 5, 879–890.

As part of the effort towards proving Zilber's conjecture on the complex exponential field (\mathbb{C}, \exp) , the author generalizes a result of Wilkie and proves that the exponential algebraic closure operator in an exponential field is always a pregeometry and it agrees with the pregeometry defined using derivations. Furthermore, he shows that the dimension function of this pregeometry satisfies a weak Schanuel property. These results rely on a result of Ax on extensions of derivations in strong extensions. We recall that in this context, an element is exponential algebraic over an exponential ring R if it is the component of some nonsingular solution of some square system of exponential polynomial equations over R , nonsingular in the sense that the natural algebraic Jacobian is nonzero.

Reviewed by *Luc Bélair*

References

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Note: This list reflects references listed in the original paper as accurately as possible with no attempt to correct errors.