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Lie tori of type  $BC_2$  and structurable quasitori

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*Review text:*

Extended affine Lie algebras (or EALAs for short) are complex Lie algebras that are higher nullity generalizations of affine Kac-Moody Lie algebras. These algebras were introduced by R. Hegh-Krohn; B. Torrsani [J. Funct. Anal. 89 (1990), no. 1, 106-136]. Actually there is a detailed structure theory for EALAs and a complete description of the centerless core of all types except the low-rank non-reduced types  $BC_2$ . In [Journal of Pure and Applied Algebra, Volume 184, Issues 2-3, 105-138] Bruce Allison and Yoji Yoshii studied the case  $BC_1$ . They showed that the centerless core of an EALA of type  $BC_1$  and nullity  $n$  is a central extension of the Kantor Lie algebra obtained from a structurable  $n$ -torus over  $\mathbb{C}$ .

In the paper under review the author completed the classification determining those of type  $BC_2$ . The authors introduce the notion of a structurable quasitorus as a variant of the notion of a structurable torus which has been used to classify centerless Lie tori of type  $BC_1$  and proved that the Kantor construction applied to structurable quasitori gives all centerless Lie tori of type  $BC_2$ . In particular they classify structurable quasitori, including Jordan quasitori.

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