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## **2-Local Derivations on the Centerless Ovsienko-Roger Algebra**

We study 2-local derivations on the centerless Ovsienko-Roger algebra  $\mathfrak{L}_\lambda$ , which is the semi-direct product of the Witt algebra and its tensor density module. We prove that every 2-local derivation on  $\mathfrak{L}_\lambda$  is a derivation for  $\lambda \in \mathbb{C} \setminus \{0, 1, 2\}$ . We divide into two cases to consider 2-local derivations on  $\mathfrak{L}_\lambda$  depending on whether the parameter  $\lambda$  is an integer, that is for the case  $\lambda \in \mathbb{Z} \setminus \{0, 1, 2\}$  and the case  $\lambda \notin \mathbb{Z}$ .

**Keywords:** Centerless Ovsienko-Roger algebra, derivation, 2-local derivation.

**MSC:** 17B05, 17B40, 17B65.