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**Cohomological Rigidity of the Schrödinger Algebra  $S(N)$  and its Central Extension  $\widehat{S}(N)$**

It is shown that for any  $N \neq 2$ , the Schrödinger algebra  $S(N)$  and its central extension  $\widehat{S}(N)$  are cohomologically rigid Lie algebras, i.e., have a vanishing second Chevalley cohomology group with values in the adjoint representation. Further, it is shown that the main cohomological difference between these algebras lies in the structure of the third cohomology space.

**Keywords:** Rigidity, Chevalley cohomology, Schroedinger algebra, Lie algebras.

**MSC:** 17B10, 17B56