

**Non-abelian tensor and exterior products of restricted Lie algebras**

Revaz Kurdiani, Razmadze Mathematical Institute, Alexidze str. 1, Tbilisi, 380093, Georgia.

**ABSTRACT**

---

We construct non-abelian tensor product and non-abelian exterior product of restricted Lie algebras. For perfect restricted Lie algebras we get a construction of the universal central extension. It is proved that the second homology group of a restricted Lie algebra can be described via exterior product.

---

**Keywords:** *Restricted Lie algebra, universal central extension, non-abelian tensor product, non-abelian exterior product*

**Mathematics Subject Classification:** *17B50, 18G50, 19C09*

**Contact Address:** rezo@rmi.acnet.ge