

1145-17-450

Tyler Kenefake* (tylerkenefake@my.unt.edu). *Annihilators of Indecomposable Bounded Modules of $\text{Vec}(\mathbb{R})$.*

We report on work in progress towards computing the annihilators of certain indecomposable bounded modules of $\text{Vec}(\mathbb{R})$, the Lie algebra of vector fields on the line. The annihilators of the tensor density modules \mathcal{F}_λ are known. We describe the annihilator of the extension of \mathcal{F}_λ by $\mathcal{F}_{\lambda+2}$ in the subalgebra of lowest weight vectors of $\mathfrak{U}(\text{Vec}(\mathbb{R}))$, the universal enveloping algebra of $\text{Vec}(\mathbb{R})$, in the non-resonant case $\lambda \neq -\frac{1}{2}$. (Received September 06, 2018)