

Erratum to my talk, MSRI, April 15 2020
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Consider G an infinitesimal group scheme, and let $\text{supp}(?)$ denote the cohomological support. There is an error in my description of the proof of the identification

$$\text{supp}(V \otimes W) = \text{supp}(V) \cap \text{supp}(W), \quad (1)$$

at ~the 30 minute mark. I erroneously claim that spectrum of cohomology $\text{Var}(G)$ is identified with the moduli of group maps $\alpha : \mathbb{G}_{a(1)} \rightarrow G$. If G is of height $\leq r$, meaning that $G = G_{(r)}$, one should consider instead the moduli $V_r(G)$ of maps $\alpha : \mathbb{G}_{a(r)} \rightarrow G$ from the r -th Frobenius kernel in \mathbb{G}_a , and shows that there is an identification $V_r(G) = \text{Var}(G)$ [1, Corollary 6.8].

One then uses this moduli interpretation of the spectrum of cohomology to compare, in a straightforward way, the support of $V \otimes W$ as a G -representation to that of $V \otimes W$ as a $(G \times G)$ -representation in order to obtain the equality (1) [1, Theorem 7.2].

REFERENCES

- [1] A. Suslin, E. M. Friedlander, and C. P. Bendel. Support varieties for infinitesimal group schemes. *J. Amer. Math. Soc.*, 10(3):729–759, 1997.