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Rhea Palak Bakshi, Dionne Ibarra, Sujoy Mukherjee and Takefumi Nosaka (przytyck@gmail.com), Bethesda, MD 20814, and Jozef H Przytycki* (przytyck@gmail.com), 10005 Broad Street, Bethesda, MD 20814. Second quandle homology from Schur multiplier.

We express the second quandle homology of a quasigroup Alexander quandles in terms of the exterior algebra of X. We present a short self-contained proof of its structure and provide some computational examples. The result is as follows: Let X be an Alexander quandle with (1-t) invertible. Then there is an isomorphism

$$H_2^Q(X,Z) = \frac{X \wedge_Z X}{(x \wedge x - tx \wedge tx)}.$$

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