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**Jieru Zhu\*** ([jieruzhu@buffalo.edu](mailto:jieruzhu@buffalo.edu)), 244 Mathematics Building, Buffalo, NY 14260-2900. *Two boundary centralizer algebras for  $\mathfrak{q}(n)$ .*

The Sergeev duality states that the action of the Type Q Lie superalgebra  $\mathfrak{q}(n)$  fully centralizes the Sergeev algebra on  $V^{\otimes d}$ , where  $V$  is the natural representation for  $\mathfrak{q}(n)$ . Hill-Kujawa-Sussan (2011) generalized this result to  $M \otimes V^{\otimes d}$ , where  $M$  is an arbitrary  $\mathfrak{q}(n)$ -module. We further generalize this to the two boundary setting, and define the degenerate two boundary affine Hecke-Clifford algebra  $\mathcal{B}_d$ . It has a  $\mathfrak{q}(n)$ -linear action on  $M \otimes N \otimes V^{\otimes d}$  for arbitrary  $\mathfrak{q}(n)$ -modules  $M$  and  $N$ . On the other hand, we also construct calibrated modules for a quotient of  $\mathcal{B}_d$  using shifted Young tableaux. These calibrated modules occur naturally as irreducible summands of  $M \otimes N \otimes V^{\otimes d}$ , when  $M$  and  $N$  are certain irreducible modules whose highest weights are represented by explicit shifted Young diagrams. (Received January 22, 2019)