Fermionic and Bosonic Representations of the Extended Affine Lie Algebra $\tilde{\mathfrak{gl}}_N(\mathbb{C}_q)$

Dedicated to Professor Robert Moody on the occasion of his 60th birthday

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Abstract. We construct a class of fermions (or bosons) by using a Clifford (or Weyl) algebra to get two families of irreducible representations for the extended affine Lie algebra $\tilde{\mathfrak{gl}}_N(\mathbb{C}_q)$ of level $(1, 0)$ (or $(-1, 0)$).