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**Andrew R. Linshaw\***, 2390 S. York St., Denver, CO 80208. *A 3-parameter vertex algebra interpolating between the diagonal cosets of  $\mathfrak{sl}_n$ .* Preliminary report.

We sketch the construction of a 3-parameter vertex algebra of type  $\mathcal{W}(2, 3, 4^2, 5^2, 6^6, 7^6, 8^{16}, 9^{24}, 10^{48}, 11^{80}, 12^{164}, \dots)$ , which interpolates between the diagonal cosets  $\text{Com}(V^{k_1+k_2}(\mathfrak{sl}_n), V^{k_1}(\mathfrak{sl}_n) \otimes V^{k_2}(\mathfrak{sl}_n))$  for all  $n \geq 3$ . The construction is based on Procesi's first and second fundamental theorems of invariant theory for the adjoint representation of  $\mathfrak{sl}_n$ , together with the notion of a nonlinear Lie conformal algebra which was introduced by De Sole and Kac. (Received September 17, 2019)