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Kaie Kubjas* (kaie.kubjas@gmail.com), Aalto Science Institute, PO Box 15500, 00076 Aalto, Finland, and **Christopher Manon** (chris.manon@gmail.com). *Berenstein-Zelevinsky triangles and group-based models.*

Berenstein-Zelevinsky (BZ) triangles are used for counting $SL_m(\mathbb{C})$ tensor product multiplicities. Group-based models are toric varieties associated with statistical models of evolution. Work of Buczynska, Wisniewski, Sturmfels, Xu, and Manon has linked the binary group-based model with the algebra of $SL_2(\mathbb{C})$ conformal blocks. There is also a close relationship between the algebra of $SL_m(\mathbb{C})$ conformal blocks and the representation theory of $SL_m(\mathbb{C})$ established by Ueno. Motivated by these results, we study the relationship between the semigroup of $SL_m(\mathbb{C})$ BZ triangles and the affine semigroup associated with the $\mathbb{Z}/m\mathbb{Z}$ group-based model. (Received August 18, 2014)