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Melkamu Zeleke* (zelekem@wpunj.edu), 300 Pompton Road, Wayne, NJ 07470, and
Mahendra Jani and **Louis W. Shapiro**. *On Combinatorial Interpretations of Shapiro's
Identities Involving some Elements of the Bell Subgroup*. Preliminary report.

The motivation for our current work is the combinatorial interpretation given to Shapiro's identity involving the Lagrange subgroup element $(1, zC(z)^2)$, where $C(z)$ is the generating function of the Catalan numbers. In this talk, we provide a combinatorial proof of Shapiro's identity involving the Central Trinomial Numbers and the Bell subgroup element $(M(z), zM(z))$, where $M(z)$ is the generating function of the Motzkin numbers, and settle a uniqueness question Shapiro asked regarding this identity. We then look at the Bell subgroup element $(T(z), zT(z))$, where $T(z)$ is the generating function of the ternary numbers and provide an alternative combinatorial interpretation of some identities involving this array using K -trees. (Received September 23, 2018)