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**Siu-Hung Ng\*** ([rng@math.lsu.edu](mailto:rng@math.lsu.edu)), Department of Mathematics, Louisiana State University,  
Baton Rouge, LA 70803. *Fusion square root of the sum of self-dual simple objects.*

There is no nontrivial self-dual simple object in any integral fusion category with odd dimension or Frobenius-Schur exponent. However, nontrivial self-dual simple objects exist in any non-integral modular tensor category. It has been shown by Gannon that the sum of the self-dual primary fields has a fusion square root in any rational conformal field theory with an odd order  $T$ -matrix. In this talk, we discuss a more general version of this result for modular tensor categories. (Received February 07, 2017)