

ODD RELATIVES OF MULTIPLE ZETA VALUES

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For a string of positive integers n_1, n_2, \dots, n_k with $n_1 > 1$, we define the multiple t -value (MtV) $t(n_1, \dots, n_k)$ to be the sum of those terms in the series for the corresponding multiple zeta value (MZV) that have odd denominators. Like MZVs, MtVs can be multiplied according to the rules of the “harmonic algebra”, and one has nice formulas for $t(2, \dots, 2)$, $t(4, \dots, 4)$, etc. similar to those for MZVs. Despite the similarities, two of the most striking results for MZVs (the sum and duality theorems) fail to hold for MtVs. But MtVs have interesting features of their own, including an apparent derivation with no counterpart in MZVs.