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**Hannah Alpert\*** ([hcalpert@math.mit.edu](mailto:hcalpert@math.mit.edu)). *Differences of multiple Fibonacci numbers.*

We show that every integer can be written uniquely as a sum of Fibonacci numbers and their additive inverses, such that every two terms of the same sign differ in index by at least 4 and every two terms of different sign differ in index by at least 3. Furthermore, there is no way to use fewer terms to write a number as a sum of Fibonacci numbers and their additive inverses. This is an analogue of the Zeckendorf representation. (Received September 20, 2011)