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Mark Bollman* (mbollman@albion.edu), Department of Mathematics, Albion College, Albion, MI 49224. *Representation of Fibonacci Numbers as Sums of Consecutive Factorials*. Preliminary report.

It has been established that the largest Fibonacci number which can be written as a sum of two consecutive factorials is $F_{12} = 144 = 4! + 5!$. We consider the related problem for more than two factorials and show that the equation $F_m = n! + (n+1)! + \cdots + (n+k)!$ has at most finitely many solutions for any specified value of k . Additionally, we confirm that this number is 0 for several values of k and that one solution exists for $k = 4$: $F_9 = 34 = 0! + 1! + 2! + 3! + 4!$. (Received September 11, 2000)