1117-17-255   **Diego A. Penta*** (`penta@math.binghamton.edu`), Department of Mathematical Sciences, Binghamton University, 4400 Vestal Parkway East, Binghamton, NY 13850, and **Alex J. Feingold** (`alex@math.binghamton.edu`), Department of Mathematical Sciences, Binghamton University, 4400 Vestal Parkway East, Binghamton, NY 13850. *Rank 2 'Fibonacci' modules inside the rank 3 Feingold-Frenkel algebra $\mathcal{F}$.*

Motivated by the 1983 work of Feingold and Frenkel, we investigate the decomposition of the rank 3 hyperbolic Kac-Moody Lie algebra $\mathcal{F}$ with respect to its rank 2 hyperbolic subalgebra Fib (Cartan matrix $\begin{bmatrix} 2 & -3 \\ -3 & 2 \end{bmatrix}$). We study highest and lowest weight Fib-modules in $\mathcal{F}$, as well as a curious type of irreducible module that is neither highest nor lowest with respect to Fib. This is a continuation of the earlier talk by Alex Feingold. (Received January 15, 2016)