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Gretchen L Matthews* (gmatthe@clemsn.edu), Dept. of Mathematical Sciences, Clemson University, Clemson, SC 29634-0975. *Fibonacci semigroups and their duals*. Preliminary report.

Let a_1, \dots, a_n be positive integers which are relatively prime. Then the numerical semigroup generated by a_1, \dots, a_n is $S := \{\sum_{i=1}^n c_i a_i : c_i \in \mathbb{Z}^+ \cup \{0\}\}$. The largest integer not in S is called the Frobenius number of S . The dual of S is formed by adding to S its Frobenius number as well as any additional pseudo-Frobenius numbers. In this talk, we study the duals of semigroups generated by certain Fibonacci numbers and relate them to associated Lipman semigroups. This gives, in a sense, a measure of how close to being Arf a Fibonacci semigroup is. (Received September 14, 2007)