

Cal Poly Department of Mathematics

Puzzle of the Week

April 3-9, 2012

Let f_n denote the n th Fibonacci number, defined by $f_0 = 0$, $f_1 = 1$, and $f_n = f_{n-1} + f_{n-2}$ for $n \geq 2$. Evaluate the sum

$$\sum_{n=0}^{\infty} \frac{f_n}{2012^n}$$

Solutions should be submitted to Morgan Sherman:

Dept. of Mathematics, Cal Poly

Email: sherman1 -AT- calpoly.edu

Office: bldg 25 room 310

before next Tuesday. Those with correct and complete solutions will have their names listed on the puzzle's web site (see below) as well as in next week's email announcement. Anybody is welcome to make a submission.

<http://www.calpoly.edu/~sherman1/puzzleoftheweek>