1098-52-241 **Michael Baake*** (mbaake@math.uni-bielefeld.de), Dept. of Mathematics, Bielefeld University, 33739 Bielefeld, Germany, and **Markus Moll** (mmoll@math.uni-bielefeld.de). *Random noble means substitutions.*

While the structure and geometry of primitive substitution rules is rather well understood, this is less so for random substitutions. We revisit an old example due to Godréche and Luck (from 1987), the random Fibonacci substitution, and extend it to the class of random noble means substitutions. Each family leads to a hull with positive entropy, although every member of the hull turns out to be a Meyer set. There is a canonical invariant measure on the hull, and the Meyer property guarantees that the pure point part of the spectrum is non-trivial. (Received January 27, 2014)