

Peter J. Larcombe, Sam T. O'Neill, and Eric J. Fennessey  
*On certain series expansions of the sine function: Catalan numbers  
and convergence,*  
Fibonacci Quart. **52** (2014), no. 3, 236–242.

**Abstract**

The appearance of Catalan numbers in certain infinite series expansions of the sine function was first reported well over a decade ago. A combination of computation and analysis is employed as we return to this topic and examine the outstanding issue of convergence for this suite of results and also for the general case expansion.