

The 8th International Conference on Lattice Path Combinatorics and Applications
(August 17 – 20, 2015, California Polytechnic State University Pomona, CA)

Title: ***A FAMILY OF BELL TRANSFORMATIONS***

Presented by: **JUAN B. GIL**

ABSTRACT: We introduce a family of sequence transformations defined by means of partial Bell polynomials. With appropriate choices of parameters, our family includes known transformations like INVERT, CONV, and EXP, as well as possibly unexplored sequence transformations. We describe our family at the level of generating functions, give inverse relations and convolution formulas, and discuss several applications for the enumeration of polygon dissections, rooted trees, and Dyck paths.

Penn State Altoona, 3000 Ivyside Park, Altoona, PA 16601