Mihai Popa* (mipopa@indiana.edu), IU Bloomington, Rawles Hall 309, 831 E 3rd Street, Bloomington, IN 47405. On the conditionally free analogue of the S-transform.

Using the combinatorics of non-crossing partitions, we construct a conditionally free analogue of the Voiculescu's Stransform. The result is applied to analytical description of conditionally free multiplicative convolution and characterization of infinite divisibility. (Received August 26, 2008)