

1014-05-1207

Kang Wu and **Haishen Yao*** (HYao@qcc.cuny.edu), Dept. of Mathematics and Computer Science, Queensborough Community College (CUNY), 222-05 56th. Ave., Bayside, NY 11580. *An Identity of Partial Derangement and Its Applications*. Preliminary report.

A permutation of n distinct, ordered items in which none of the items is in its original ordered position is known as a derangement. If some, but not necessarily all, of the items are in their original ordered positions, the configuration is called a partial derangement. We prove an identity of partial derangement and also present some applications. (Received September 27, 2005)