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**Tom Halverson\*** (halverson@macalester.edu), Macalester College, 1600 Grand Ave, Saint Paul, MN 55105, and **Nathaniel Thiem**. *Restriction-Induction Centralizer Algebras*. Preliminary report.

The partition algebra is the centralizer algebra of the  $k$ -fold tensor product of the permutation module of the symmetric group  $S_n$ . This tensor product module is isomorphic to  $k$ -fold iterations of restriction from  $S_n$  to  $S_{n-1}$  and induction back to  $S_n$ . We explore the general phenomenon of restriction-induction centralizer algebras. As an application we will consider two different ways to construct a  $q$ -analog of the partition algebra, one coming from restriction and induction on Iwahori-Hecke algebras and one coming from Harish-Chandra restriction and induction on finite general linear groups. (Received August 13, 2014)