Jim Haglund, Jeff Remmel, Brendon Rhoades and Andy Wilson* (andwils@math.upenn.edu). Statistics on ordered set partitions. Preliminary report.

We show that several statistics on ordered set partitions are equidistributed, generalizing MacMahon's classical theorem relating inversion number to major index. As a byproduct, we obtain a new bijective proof of MacMahon's theorem. By applying the RSK correspondence to our results, we produce the Schur expansion of a generalization of the Frobenius series of the type A coinvariant ring. (Received January 15, 2016)