

CMI Mathematics Colloquium

September 6, 2023

Cyclic characters of alternating group

Amrutha P

The cyclic characters of a group G are the characters induced from the cyclic subgroups of G . In the case of classical Coxeter groups, Kraskiewicz and Weyman worked out the decomposition into irreducible characters of characters induced from the cyclic subgroup generated by a Coxeter element. Jöllenbeck and Schocker gave a general approach for the case of symmetric group, S_n , by considering the cyclic group generated by any element of S_n . The cyclic characters of S_n are described in terms of a statistic on the Young tableaux called the multi major index. In this talk, we will see a description of the cyclic characters of the alternating group. This is joint work with Amritanshu Prasad and Velmurugan S.