Hurwitz action in complex reflection groups

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Abstract

In this talk, well discuss the Hurwitz action on reflection factorizations in the infinite family G(m, p, n) of complex reflection groups. Well present a formula that counts the number of Hurwitz orbits of an arbitrary element in G(m, p, n). As a consequence, we'll characterize the elements for which the action is transitive and give a simple criterion to tell when two minimum-length reflection factorizations belong to the same Hurwitz orbit. Based on joint work with Joel Brewster Lewis.

Keywords: complex reflection group, Hurwitz orbit.