

1016-05-273

Ian Goulden* (ipgoulde@uwaterloo.ca), Dept. Combinatorics and Optimization, University of Waterloo, Waterloo, Ontario N2L3G1, Canada. *The Faber-Hurwitz number generating series*. Preliminary report.

The Faber-Hurwitz numbers, indexed by genus and a partition, satisfy a modified form of the "join-cut" equation for Hurwitz numbers. We consider the generating series for these numbers, and show that it has an expansion analogous to the Itzykson-Zuber ansatz for the Hurwitz case. In the latter case, the coefficients are Hodge integrals; in our case, the coefficients appear to be integers, though we do not have a direct geometric interpretation. This is joint work with David Jackson and Ravi Vakil (Received February 14, 2006)