1056-20-782 Nir Avni^{*}, Department of Mathematics, Harvard University, Cambridge, MA 02138. A Survey On Representation Zeta Functions.

The Representation Zeta Function of a group G is a generating function for the number of irreducible, *n*-dimensional representations of G. I will describe several surprising properties related to the poles, functional equations, and special values of these functions. (Received September 17, 2009)