984-20-237 **Graham Denham*** (gdenham@uwo.ca), Department of Mathematics, University of Western Ontario, London, Ontario N5A2B3, Canada, and **Nicole Lemire**. *Equivariant Euler characteristics of Milnor fibres of reflection arrangements.*

Let G be a finite, complex reflection group acting on a complex vector space. The fibres of the discriminant polynomial admit commuting actions of G and a cyclic (monodromy) group C_m. The virtual $G \times C_m$ character given by the Euler characteristic of a fibre is a refinement of the zeta function of the monodromy, calculated by Denef and Loeser in 1995. Recent developments in Springer's theory of regular elements make it possible to describe this virtual character explicitly, in terms of a poset of certain subgroups of G. In particular, it turns out to be a diagram invariant, in the sense of Broué, Malle, and Rouquier. (Received January 22, 2003)