1023-14-1697   **Raymond P Curran*** (`rcurran@mscd.edu`), 1240 Sherman St., Denver, CO 80203. *Resultant formula for the $A-$ discriminant and dual defect toric varieties.*

In the 1980's, Gelfand, Kapranov and Zelevinsky introduced the discriminant, D_A of a toric variety X_A, as the defining equation of the projective dual X_A^*, when X_A^* is a hypersurface. Otherwise X_A is called *dual defect*. Dual defect toric varieties have been classified in the smooth case [2], and in codimension 2 [1]. We prove a resultant formula for D_A and a Gale dual characterization of dual defect toric varieties. This allows us to classify such varieties of codimension at most four.

References

[1] A. Dickenstein and B. Sturmfels. Elimination theory in codimension 2. *J. Symbolic Comput.*, 34:119–135, (2002).

[2] Di Rocco, S. Projective duality of toric manifolds and defect polytopes, *Proc. London Math. Soc.* 93: 85-104 (2006).

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