1023-14-574 **Michael O Joyce*** (mjoyce@math.tulane.edu), Department of Mathematics, Tulane University, 424 Gibson Hall, 6823 St. Charles Ave., New Orleans, LA 70118, and **Zachariah C Teitler** (zteitler@selu.edu), Department of Mathematics, SLU 10687, Hammond, LA 70402. *A nef cone volume for generalized Del Pezzo surfaces.* Preliminary report.

For a smooth projective algebraic variety X, $\alpha(X) > 0$ is a measure of the size of the dual to the cone of effective divisors on X. If X is a surface, $\alpha(X)$ measures the size of the nef cone of X. Manin's conjecture predicts an asymptotic expression for the number of rational points of bounded height on X, in which the constant $\alpha(X)$ appears. Values of $\alpha(X)$ were found by Derenthal for split Del Pezzo surfaces, and also for split generalized Del Pezzo surfaces using a computer calculation. We reproduce and extend these results without a computer both via an inductive method and by using the action of the Weyl group on the nef cone. (Received September 18, 2006)