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Abu C Thomas* (athoma17@tulane.edu). *Estimation of Resurgence for various classes of Homogeneous Ideals.*

Motivated by Chudnovsky's Conjecture and containment problems, we study the invariants of a homogeneous ideal in a polynomial ring such as its Resurgence, Asymptotic Resurgence etc. A lot of algebraic properties of the ideal and in some cases geometric properties of the Scheme defined by the ideal can be derived from the measure of containment and non containment among symbolic and ordinary powers of ideal. In this aspect, computation of Resurgence, Asymptotic Resurgence which measures the containment/non containment of ideals can be very useful.

Following the joint work (with S. Bisui, T. Hà, A.V Jayanthan) of estimating the Resurgence, Asymptotic Resurgence of ideals corresponding to schemes in a bi-projective space $\mathbb{P}^m \times_k \mathbb{P}^n$, we will look at the estimation of various other classes of homogeneous ideals. (Received January 26, 2020)