1135-30-1031 **Krishna Subedi*** (krshna.subedi@rockets.utoledo.edu), 1425 Oak Hill Ct Apt #32, Toledo, OH 43614, and **Zeljko Cuckovic** (zeljko.cuckovic@utoledo/edu), 2801 Bancroft, Toledo, OH 43606. *Necessary condition for the hyponormality of Toeplitz opetators on the weighted Bergman space.*

Recently, Cuckovic and Curto have proved that for $\varphi \equiv \alpha z^n + \beta z^m + \gamma \bar{z}^p + \delta \bar{z}^q$ where $\alpha, \beta, \gamma, \delta \in \mathbb{C}$ and $m, n, p, q \in \mathbb{Z}, m < n$ and $p < q$. By letting T_φ act on vectors of the form

$$z^k + cz^l + dz^r (k < l < r).$$

They studied the asymptotic behavior of a suitable matrix of inner products, as $k \Longrightarrow \infty$. And they obtain

$$|\alpha|^2 n^2 + |\beta|^2 m^2 - |\gamma|^2 p^2 - |\delta|^2 q^2 \geq 2|\bar{\alpha}\beta mn - \bar{\gamma}\delta pq.$$

In this talk I will show this conjecture is true in weighted Bergman space too. (Received September 18, 2017)