1026-05-25 **Jose A. Rodriguez*** (jose.rodriguez@liu.edu), Computer Science Dept LLC 206, Long Island University - Brooklyn Campus, 1 University Plaza, Brooklyn, NY 11201. *On the almost-regularity of dense graphs with a maximum number of spanning trees.*

Let $\Gamma(n,e)$ be the class of all simple graphs on n vertices and e edges, and let $t(G)$ and $\tau(G)$ denote the number of spanning trees and the number of triangles of graph G. $G \in \Gamma(n,e)$ is *t-optimal* if $t(G) \geq t(G')$ for all $G' \in \Gamma(n,e)$. $G \in \Gamma(n,e)$ is *almost-regular-τ-min* if G is almost regular and $\tau(G) <= \tau(G')$ for all almost-regular $G' \in \Gamma(n,e)$ We show that for $K > 0$ there is a positive integer $N(K)$ such that, for $n > N(K)$ and $e > n(n-1)/2 - Kn$, every t-optimal graph in $\Gamma(n,e)$ is almost-regular-τ-min. (Received January 15, 2007)