

1106-60-1627

Sidney I Resnick* (sir1@cornell.edu), Cornell University, ORIE, Rhodes 284, Ithaca,, NY 14853. *Tauberian Theory for Multivariate Regularly Varying Distributions with Application to Preferential Attachment Networks.*

Abel-Tauberian theorems relate power law behavior of distributions and their transforms. We formulate and prove a multivariate version for non-standard regularly varying measures on the positive p -dimensional quadrant and then apply it to prove that the joint distribution of in- and out-degree in a directed edge preferential attachment model has jointly regularly varying tails. (Joint with G. Samorodnitsky) (Received September 14, 2014)