1014-54-1097 Hueytzen J Wu* (kfhjw00@tamuk.edu), MSC 172, Department of Mathematics, Texas A & M University - Kingsville, Kingsville, TX 78363-8202, and Wan-Hong Wu (didiwu@idd.org), 14960 Omicron Drive, San Antonio, TX 78245-3217. The equivalence of the net & open-filter process and the open C*-filter process of compactification.

The Open C*-filter Process: For each f in C*(X), there exists a real number r(f) such that for any finite subset H of C*(X), the finite intersection T(H,t) of the inverse images of open interval centered at r(f) with radius t of f for f in H is non-empty. The collection of all finite intersection T(H,t) for any finite subset H of C*(X) and any positive real number t is called an open C*-filter base. An open filter P containing some open C*-filter base is called an open C*-filter. Let Xo be the collection of all open nhood filters Nx at x for all x in X, where Nx and Ny are different if x and y are different in X. Let Y be the collection of all open C*-filters that do not converge in X, and Z the union of Xo and Y. For each non-empty open set U, let S(U) be the collection of all open C*-filters P in Z such that U is in P. Equip Z with the topology induced by the collection of all S(U) for all non-empty open sets U in X. Let h be the function from X to Z mapping x to Nx for all x in X. Then (Z, h) is a compactification of X. The Net & Open-filter Process: See AMS ABSTRACTS p.136 (993-54-25), V.25, No.1, Issue 135. Conclusion: The net & open-filter Process and the open C*-filter process of compactification of an arbitrary topological space X are equivalent. (Received September 27, 2005)