

1172-54-106

Qian Hu* (qh1014@wildcats.unh.edu), 33 Academic Way, Math Dept UNH, Durham, NH
03824. *Additive Local Multiplications and zero-preserving maps on $C(X)$.*

Suppose X is a compact Hausdorff space. In terms of topological properties of X , we try to determine when every additive local multiplication on $C(X)$ is a multiplication. We also try to determine when every additive map T on $C(X)$ that is zero-preserving has the form $T(f) = T(1)Ref + T(i)Imf$. (Received August 20, 2021)