

1096-46-1301

**Alexander A Katz\*** ([katza@stjohns.edu](mailto:katza@stjohns.edu)), St. John's University, SJC of LAS, Dep. of Math & CS, 8000 Utopia Parkway, SJH-334-i, Queens, NY 11439. *On Pedersen-Takahasi Theorem for locally  $C^*$ -algebras.*

Pedersen and Takahasi have obtained the following characterization of an order-related subalgebra in a  $C^*$ -algebra  $A$ :  $B$  is an order-related subalgebra of  $A$  if and only if each positive linear functional on  $B$  has a unique norm-preserving extension to  $A$ . We extend this result to obtain an analogous characterization of order-related subalgebras in locally  $C^*$ -algebras. (Received September 14, 2013)