

ANALYSIS SEMINAR

A REPRESENTATION THEOREM FOR D-RINGS

KARIM BOULABIAR
DÉPARTEMENT DE MATHÉMATIQUES
UNIVERSITÉ DE CARTHAGE
TUNISIA

MONDAY, MARCH 3, 2003 IN ROOM 331 AT 2:15 PM

ABSTRACT. Let $C(X)$ be the space of all real-valued functions on a completely regular topological space X and let $$ be an associative multiplication in $C(X)$. Then $C(X)$ is a d -ring with respect to $*$ if and only if $*$ is a weighted composition multiplication in $C(X)$. The latter means that there exist a weight function w in $C(X)$ and two maps r and s from X into X such that $(f * g)(x) = w(x)f(r(x))g(s(x))$ for all x in X and f, g in $C(X)$.*