LIST OF SYMBOLS

Symbols	Meanings
iff	if and only if
$<$	less than
$\in$	belongs to
$\notin$	does not belongs to
$\leq$	less than equal
$>$	greater than
$\geq$	greater than equal
$\not<$	not less than
$\not\leq$	not less than equal
$\not>$	not greater than
$\not\geq$	not greater than equal
Λ	index set
$\forall$	for all
$\bigwedge$	infimum

$\bigvee$	supremum
L	completely distributive
	lattice with an order reversing involution $'$
L^X	The family of all $L-$fuzzy sets on X
x_α	$L-$fuzzy point with support x and value $\alpha, \alpha \in L$
$Pt(L^X)$	The set of all fuzzy point of X
$A \bigcup B(x)$	$A(x) \bigvee B(x),\ \forall x \in X$
$A \bigcap B(x)$	$A(x) \bigwedge B(x),\ \forall x \in X$
$A \subseteq B$	iff $A(x) \leq B(x)$
$\mathscr{A}, \mathscr{B}$	$L-$covers
$\mathscr{A} \preccurlyeq \mathscr{B}$	$\mathscr{A}$ refines $\mathscr{B}$
$\mathfrak{U}, \mathfrak{S}$	collection of $L-$covers
$f^{\leftarrow}$	L-fuzzy reverse mapping
$f^{\rightarrow}$	L-fuzzy mapping
nbhd	neighbourhood
int	Interior
cl	closure
$x_\alpha q A$	x_α quasi-coincident with A
$A \hat{q} B$	A quasi-coincident with B
$\mathscr{Q}(x_\alpha)$	family of all Q-nbhd at x_α
$\preccurlyeq$	refinement
$st(A, \mathscr{A})$	$\bigcup\{B : B \bigcap A = \underline{0}, B \in \mathscr{A}\}$
$st(x_\alpha, \mathscr{A})$	$\bigcup\{B : x_\alpha \in B, B \in \mathscr{A}\}$
$st(\mathscr{A})$	$\bigcup\{st(A, \mathscr{A}) : A \in \mathscr{A}\}$

C-TOP	The category of $L-$ fuzzy topology with variable-basis and $L-$continuous functions as morphisms