

Limits and generalized limits

$$\tau(y) \stackrel{\text{def}}{=} \{ \langle \mu \rangle \{x\} \times^{\text{FCD}} \langle \nu \rangle \{y\} \mid x \in D \}.$$

Theorem Let μ be a T_2 -separable funcoïd and ν be a non-empty funcoïd such that $\nu \sqsubseteq \nu \circ \nu$. If $\lim_x f = y$ then $\text{xlim}_x f = \tau(y)$.

This theorem establishes a bijective correspondence (namely τ) between limits and a subset of generalized limits.