

Multiplex stream graphs : tableau récapitulatif des notions existantes pour les streams et les multilayer et pour les Stream-multilayer

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Classical Graphs $G = (V, E)$	Stream graphs $S = (T, V, W, E)$	Multilayer $M = (V_M, E_M, V, L)$	Multilayer stream graphs $M = (T, T_M, V, W_M, E_M, \mathcal{L})$
-	-	intra-layer graph	intra-layer graph
-	-	inter-layer graph	inter-layer graph
-	coverage $\text{cov}(S) = \frac{ W }{ T \times V }$	-	intra/inter layer coverage (importance de garder les V_M ?)
-	G_t graph at t	-	M_t
-	Graph induced	-	Multilayer induced
-	$G(S)$	-	$M_I(M)$
-	-	underlying graph $G(M)$	underlying Stream S_U
Number of nodes $ V $	Number of nodes $\frac{ W }{ T }$	Number of nodes $ V $	Number of nodes $\frac{ W }{ T }$??? problem
number of links $ E $	number of links $\frac{ E }{ T }$	number of links $ E_M $	number of links ??? to do
-	compactness $\frac{ W }{ T' \times V' }$	-	compactness ???
-	uniformity $\frac{\sum_{uv \in V \otimes V} T_u \cap T_v }{\sum_{uv \in V \otimes V} T_u \cup T_v }$	-	uniformity ??? to do
density $\frac{ E }{ V \otimes V } = \frac{ E }{ V (V -1)}$	density $\delta(S) = \frac{\sum_{uv \in V \otimes V} T_{uv} }{\sum_{uv \in V \otimes V} T_u \cap T_v } = \frac{\int_{t \in T} E_t dt}{\int_{t \in T} V_t \otimes V_t dt}$??	density ?

- : doesn't exists

Classical Graphs	Stream graphs	Multilayer	Multilayer stream graphs
Degree = number of neighbours	degree of v = number of nodes on the neighbour- hood . $d(v) =$ $\sum_{u \in V} \frac{ T_{uv} }{ T }$	multiple possibil- ities : node-layer / aggregated graph / underly- ing graph...	???