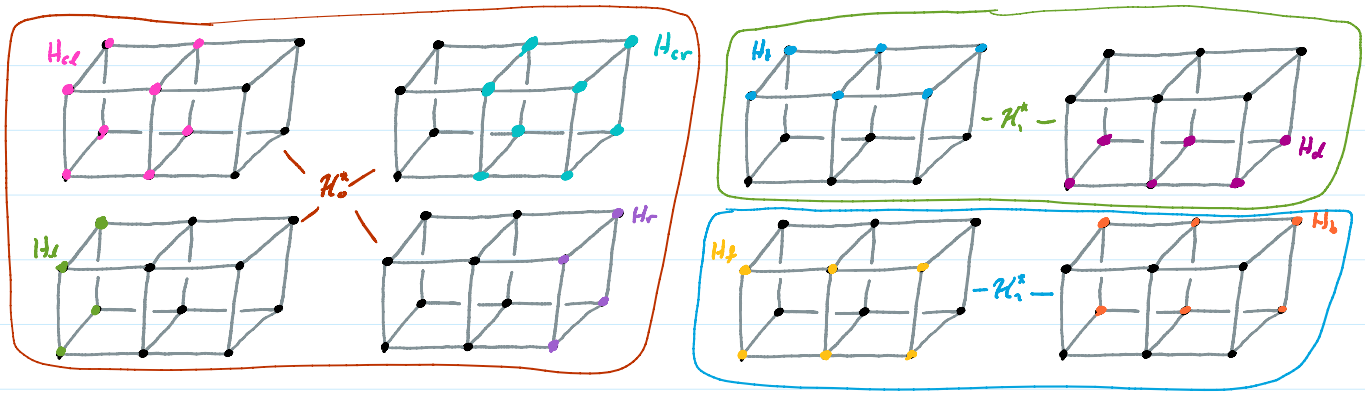
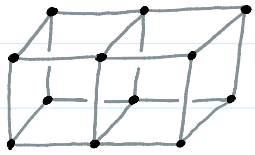
09 June 2024 14:38

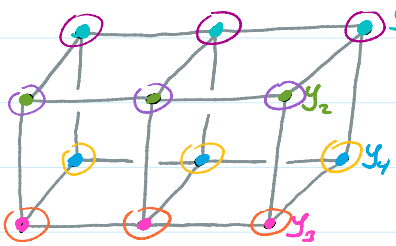


Want to construct for each $T_0 \subseteq T_1 \subseteq T_2 \subseteq G$ s.t. connected components of T_n are K_n-blocks.

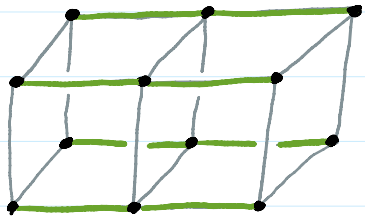
$T_0 := \emptyset$



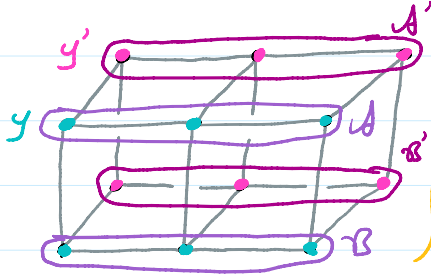
Given T_0, let $Y \in X/K_1$, where $K_1 := K_1 \cup K_2$. K_0 is nested, so each Y/K_0 (which is $\cong Y$ since each (K_0-block) $\cap Y$ are singletons) is a tree, which looks like •——•——•.



$T_1 :=$

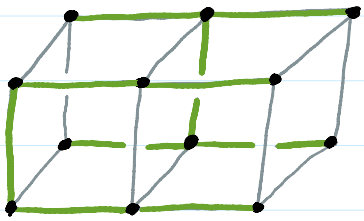


Given T_1, let $Y \in X/K_1$. Each Y/K_1 is a tree (looks like ! where each • = {•——•})

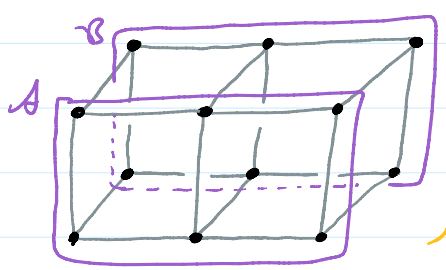


separation of each Y_i into K_1-blocks

$T_2 :=$



Given T_2. $K_2^* = \emptyset$, so $X/K_2 = \{X\}$, so $Y = X$.



separation of X into K_2-blocks

This is the desired subtree!

$T_2 :=$