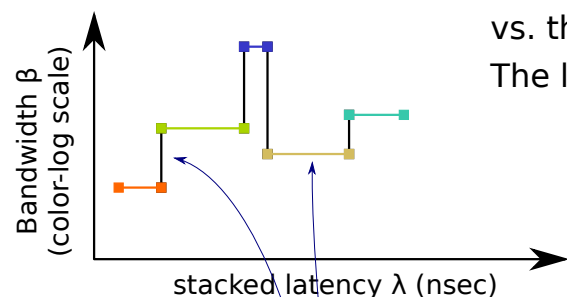


# Beta-Lambda Network Graphs

Shows individual latency ( $\lambda$ ) & total latency ( $\Lambda = \sum_{i=0}^{n-1} \lambda_i$ )

vs. the bandwidth for the **hops** of a network **path**.

The lowest bandwidth limits (sets) the overall path bandwidth (B).



In a beta-lambda graph, the vertical axis indicates bandwidth; typically on a log10 scale. When colors are available, the bandwidth is redundantly indicated by standard colors. These colors should also be used in network topology diagrams where the lines (edges) use the same colors:

navy	- 100Tbps+	(not part of resistor colors but the future is close!)
teal	- 10Tbps	(not part of the resistor colors, but networks are fast enough that we need this now)
white	- 1Tbps	(use light cyan/"electric blue" if white doesn't show well)
slate	- 100Gbps	
indigo	- 40Gbps	(not part of the resistor colors but a common link speed so an intermediate color is used speeds)
violet	- 10Gbps	
blue	- 1Gbps	
green	- 100Mbps	
yellow	- 10Mbps	(on light backgrounds, use dirty yellow since bright yellow doesn't show well)
orange	- 1Mbps	
red	- 100kbps	
brown	- 10kps	
black	- 1kbps or unspecified	

Yep... the colors come from the Resistor Color Code. It's the multiplier value in **kbps** (thus gold, silver, & pink can be used to get ye down to 1 bps)

Each horizontal segment is a network "hop"; the chain of hops is a "path". The length of each link indicates its latency. Where large latency variations exist; use a log scale.

Vertical(-ish) transitions in the diagram are switches; if not quite vertical the horizontal component indicates switch-fabric latency.