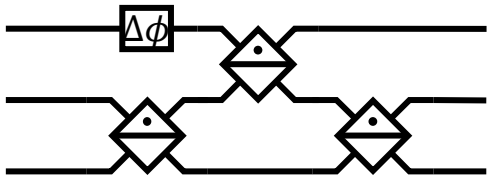
Ansys Lumerical > Quantum Photonic Circuit Simulation

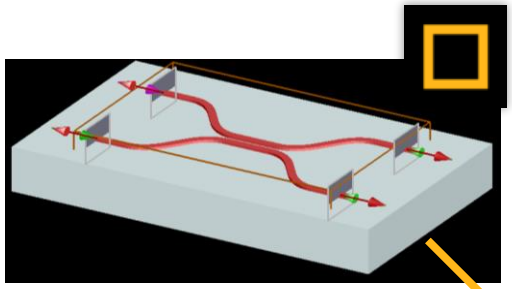
Today, our customers use our photonic simulation tools to design next generation quantum communication & computing technology

> "With the help of Ansys Lumerical … we were able to optimize each and every component of our X8 circuit for unprecedented low-loss performance, compactness, and high manufacturing tolerance."
> *Blair Morrison, Lead of Integration at Xanadu*

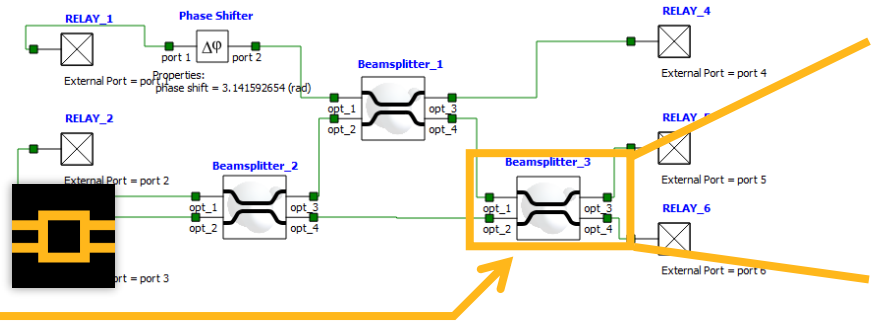
qINTERCONNECT > Simulate quantum state transformation in photonic integrated circuits

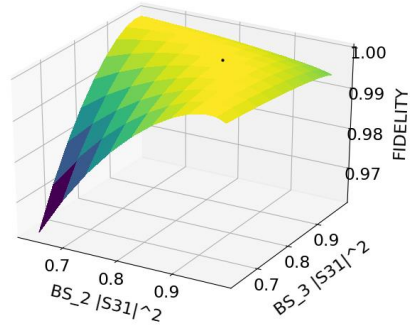


$$|\psi_{in}\rangle = \alpha|0\rangle + \beta|1\rangle + \gamma|2\rangle$$
$$|\psi_{out}\rangle = \alpha|0\rangle + \beta|1\rangle - \gamma|2\rangle$$



parametric





qINTERCONNECT is available in our 2022R2 release (July) with INTERCONNECT
More information at https://optics.ansys.com/hc/en-us
Start a free trial https://www.lumerical.com/evaluate-for-free/