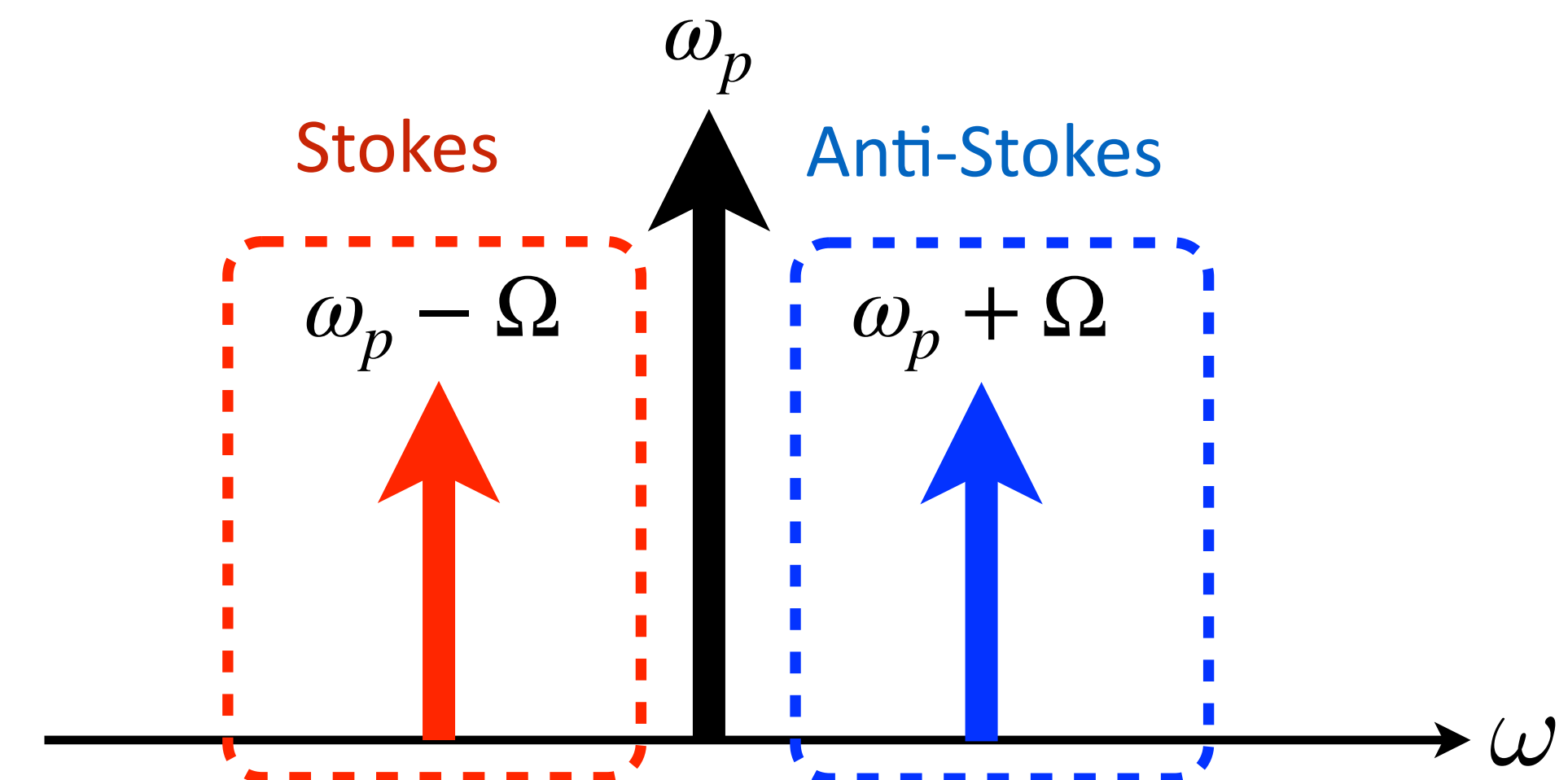
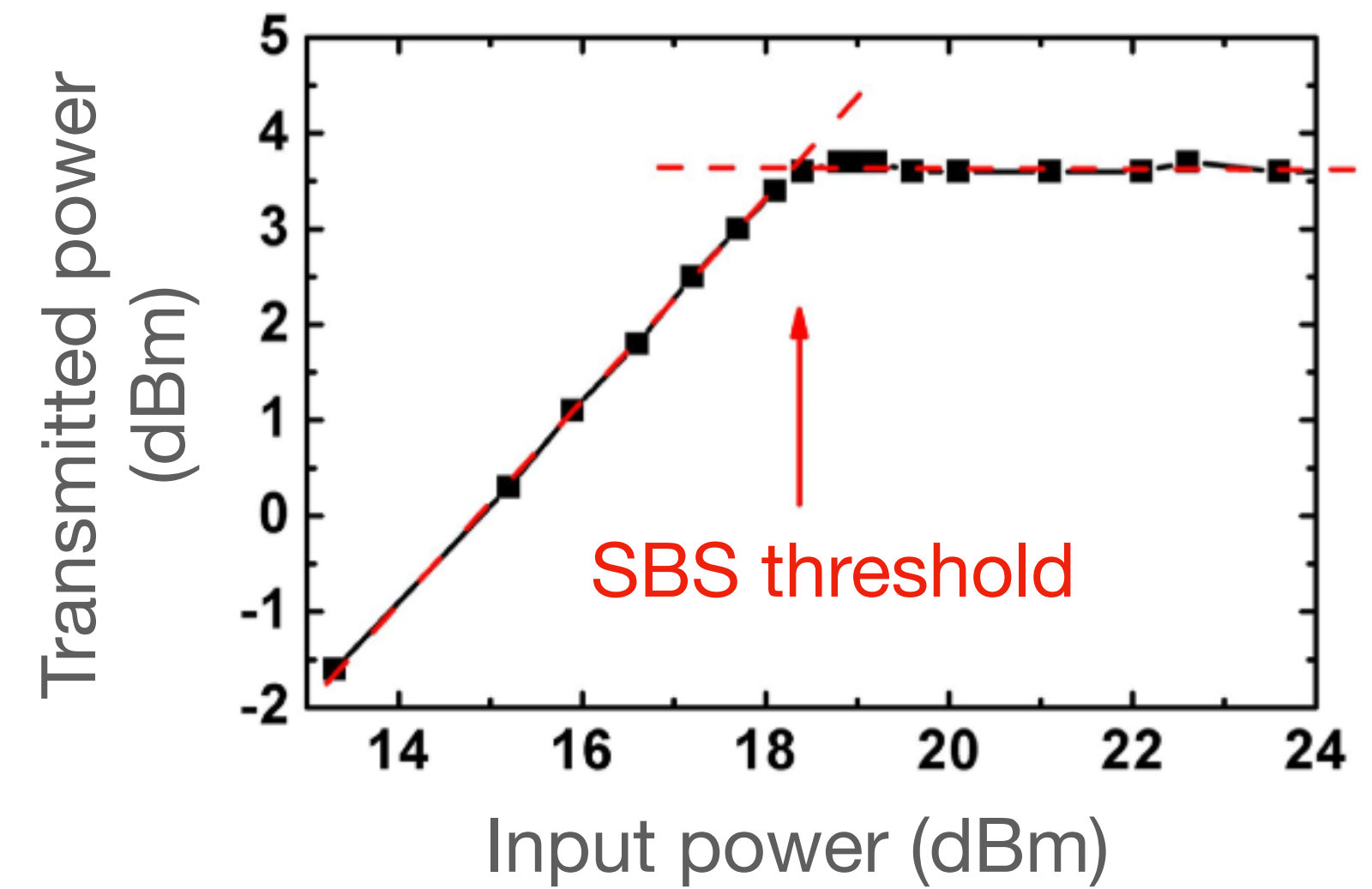
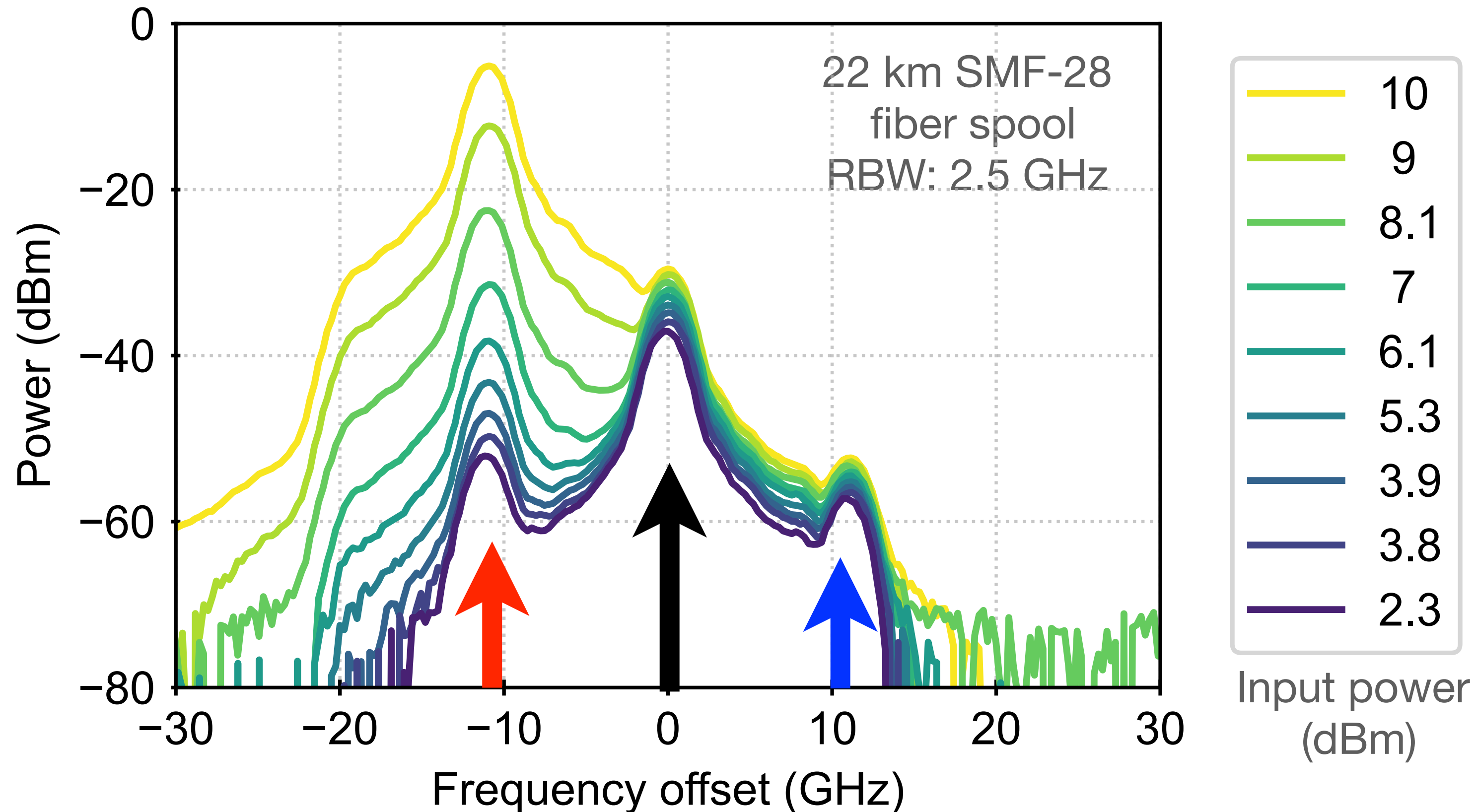
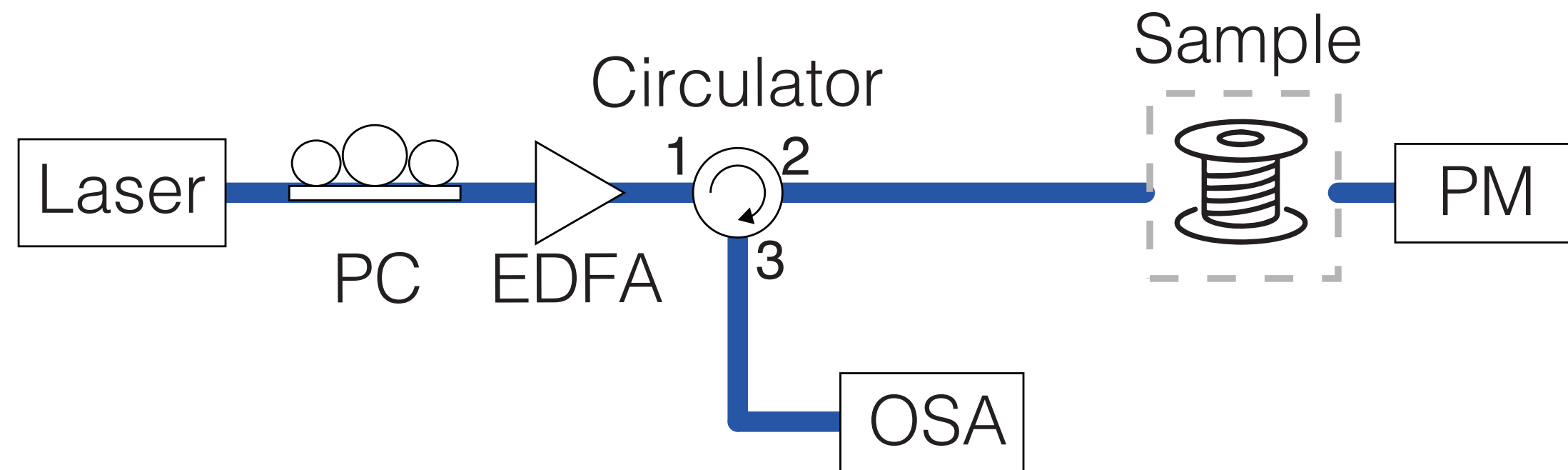




Backward BS may grow strong in a standard optical fiber

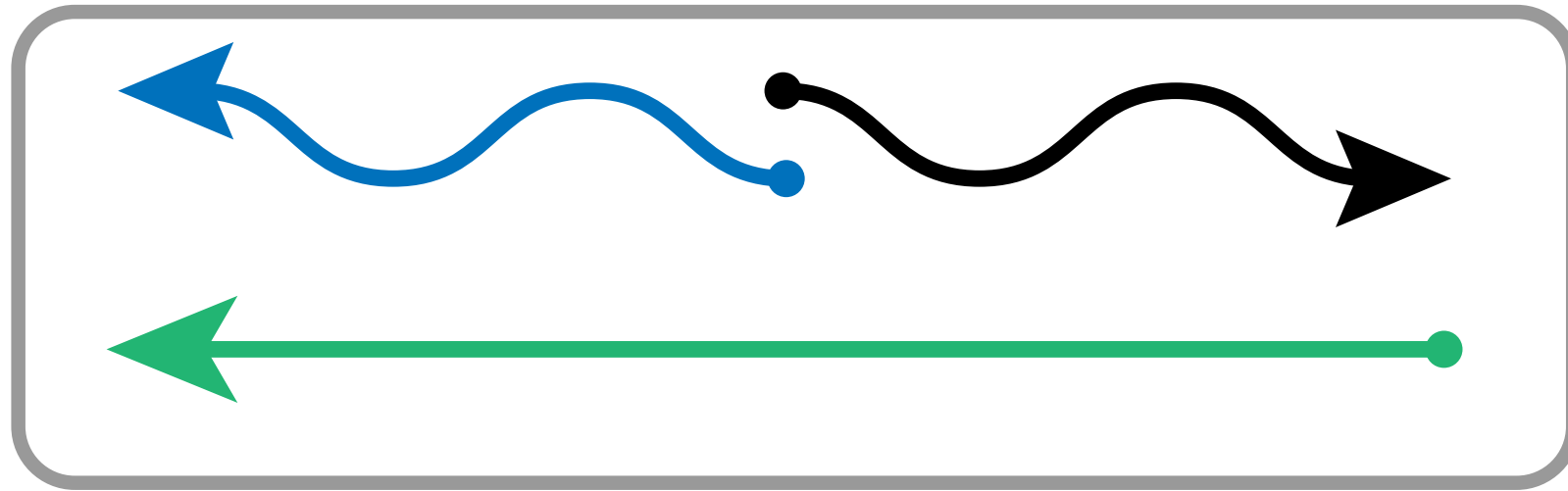




Momentum conservation (phase-matching)

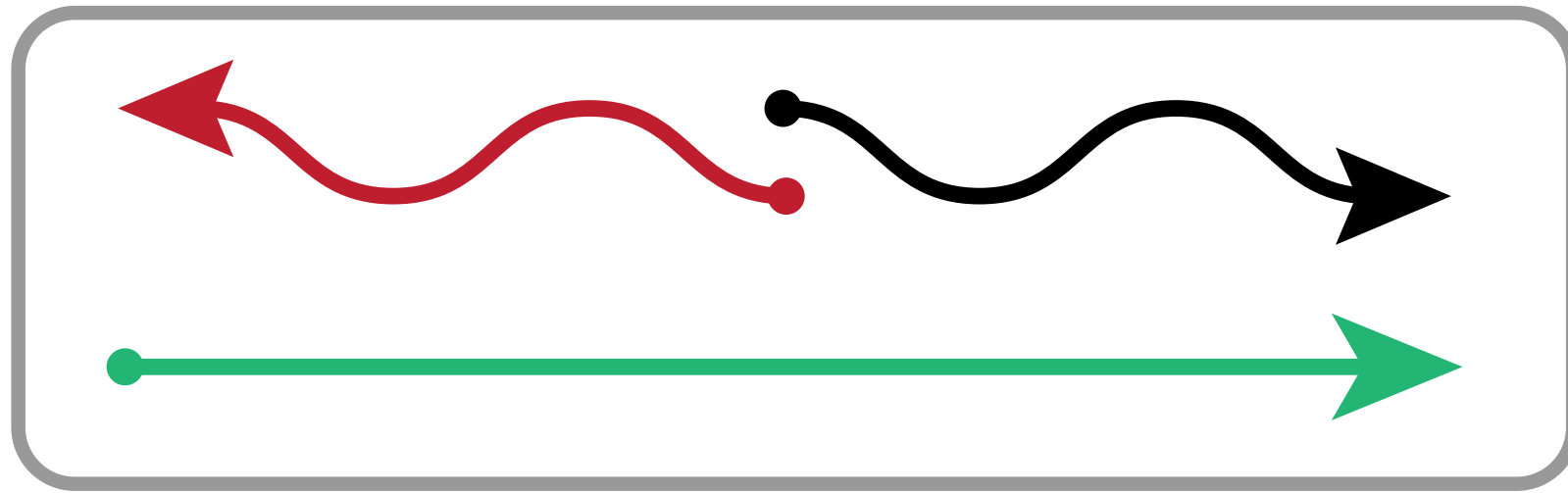
Backward Scattering

Anti-Stokes



$$q_{aS} = - (|k_{aS}| + |k_p|)$$

Stokes



$$q_S = + (|k_S| + |k_p|)$$

