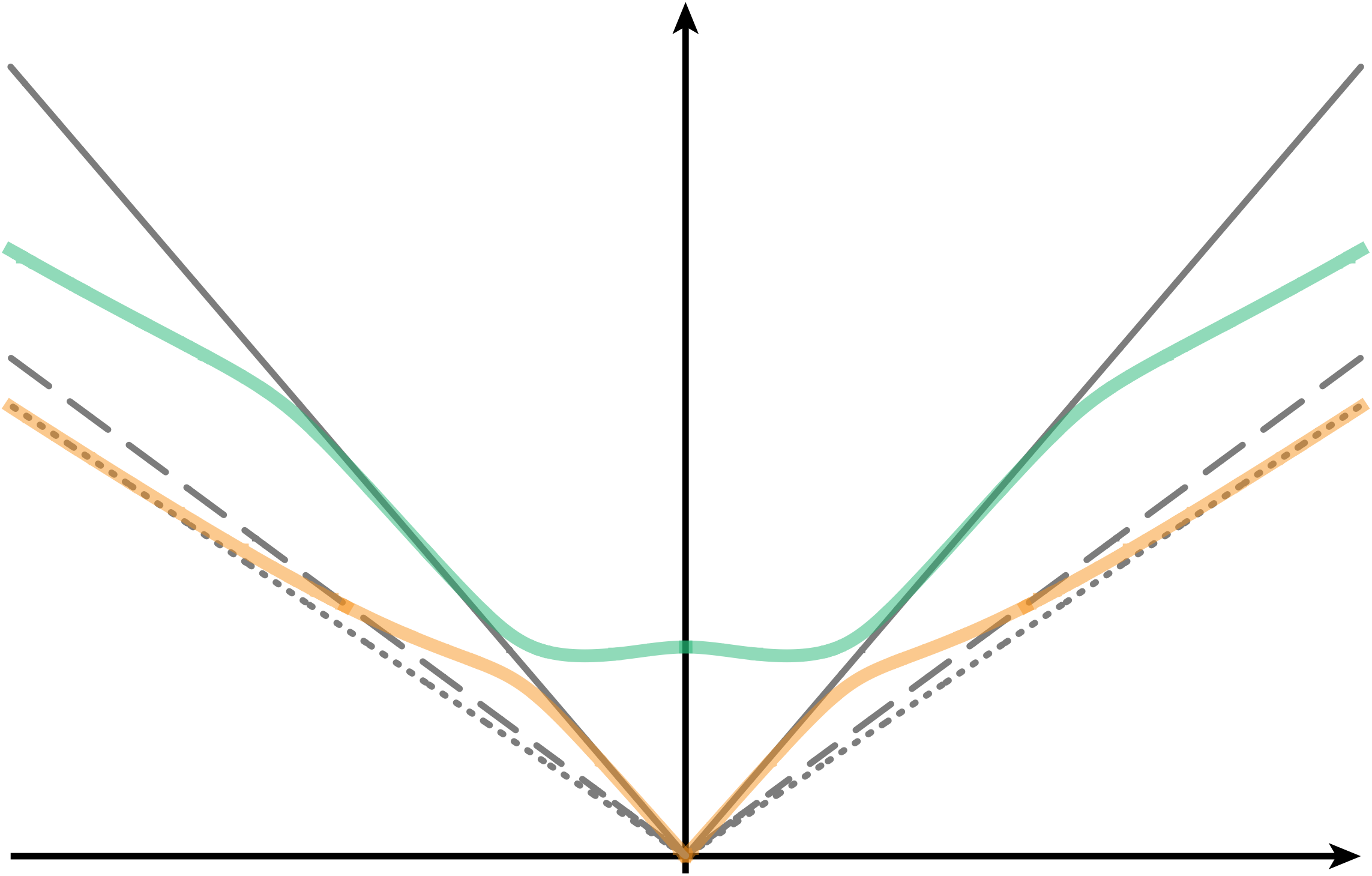

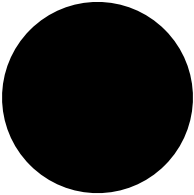

Phase-matching: inter-modal FW

Phase-matching: intra-modal FW

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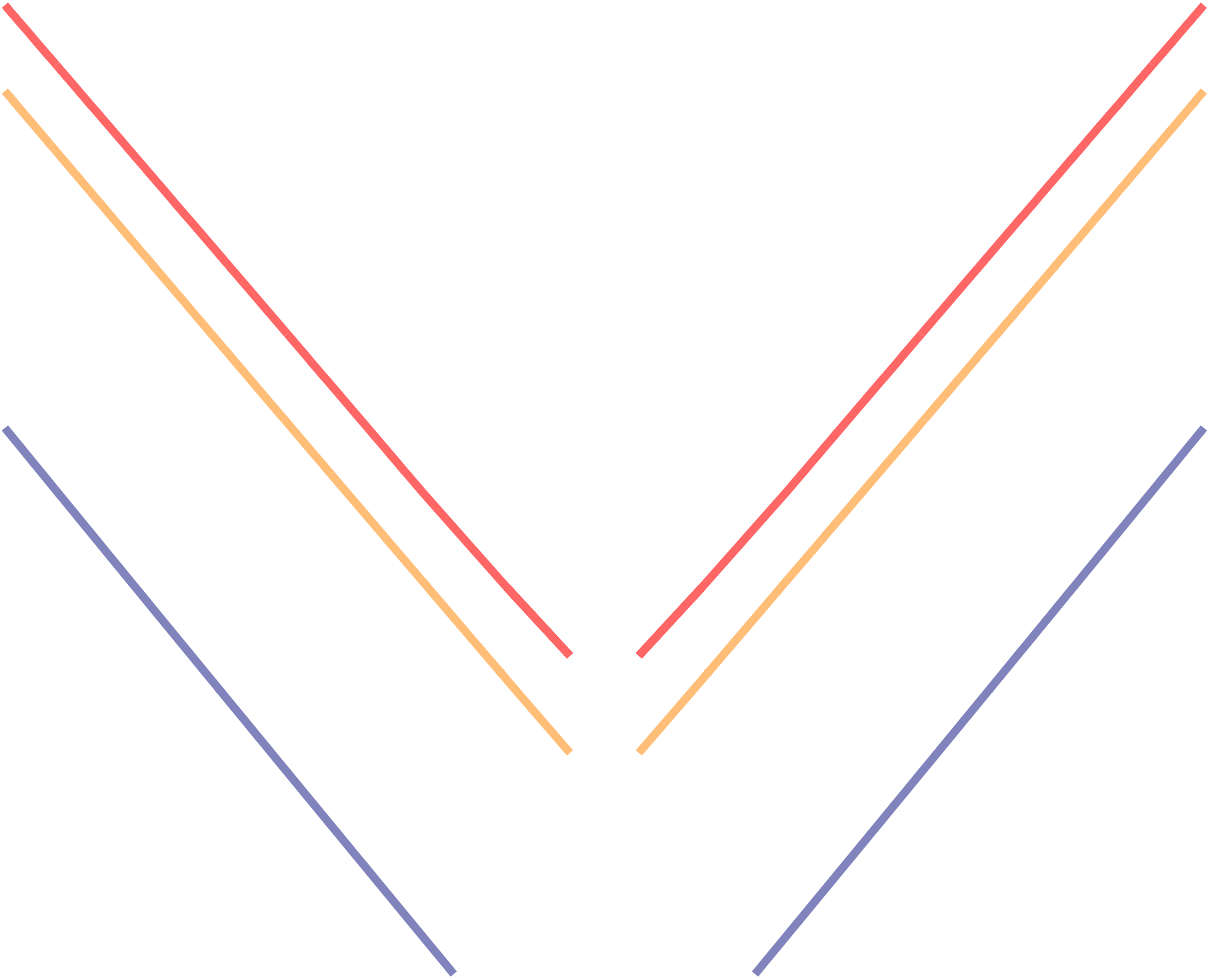
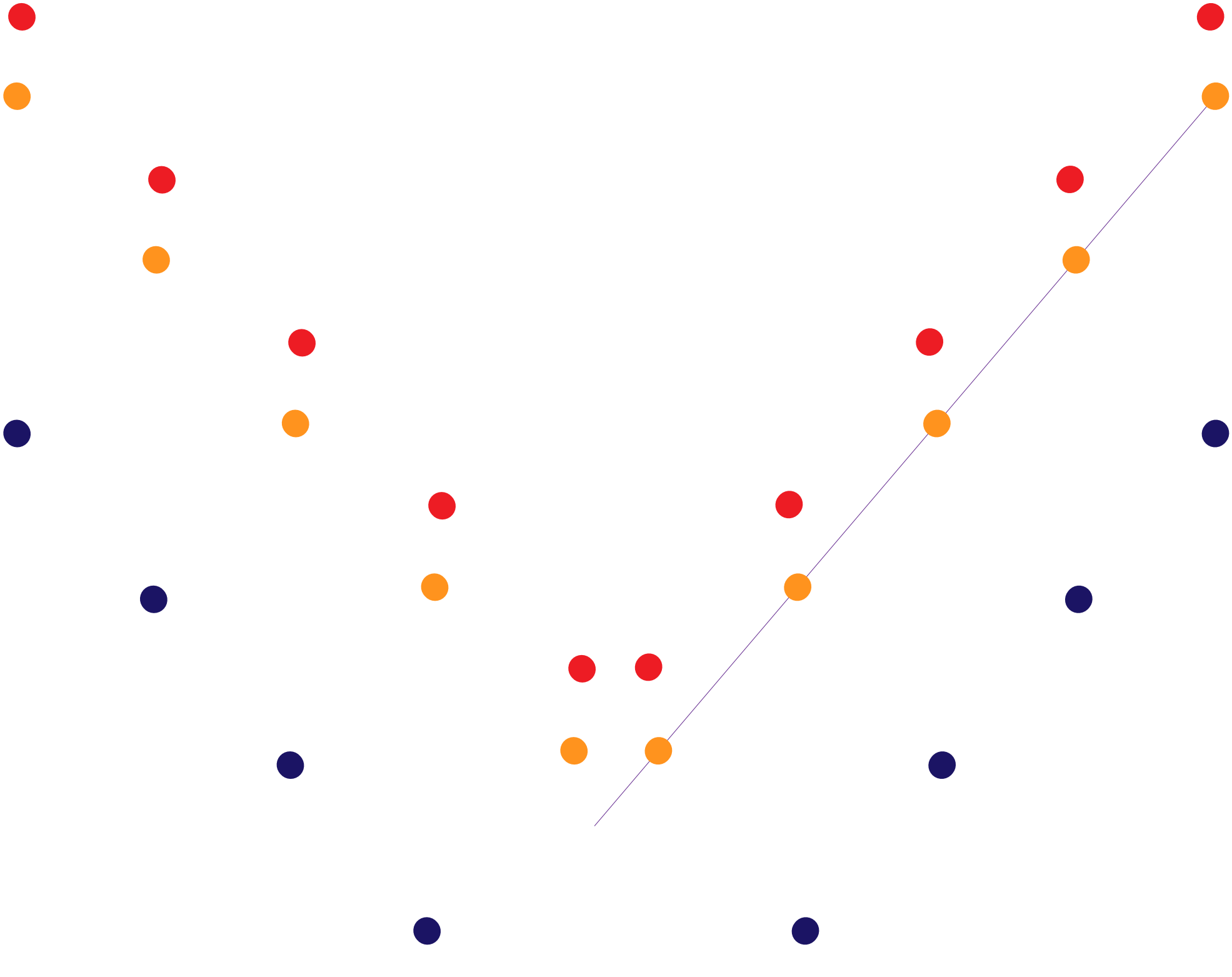
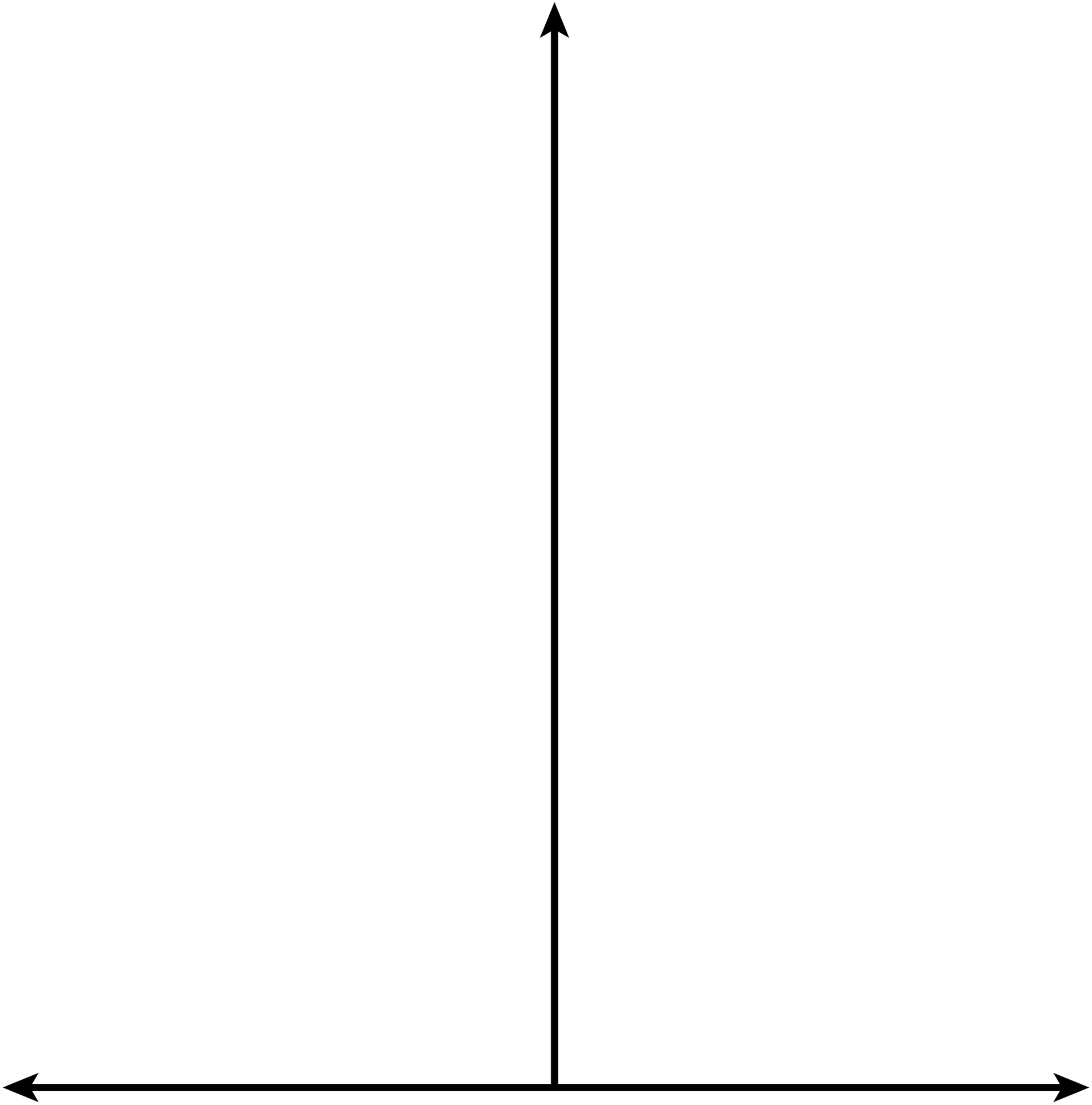
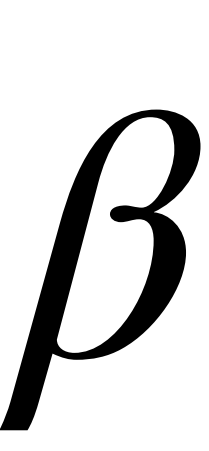
Wombat 2022, Erlangen, June 14th 2022. Gustavo Wiederhecker.



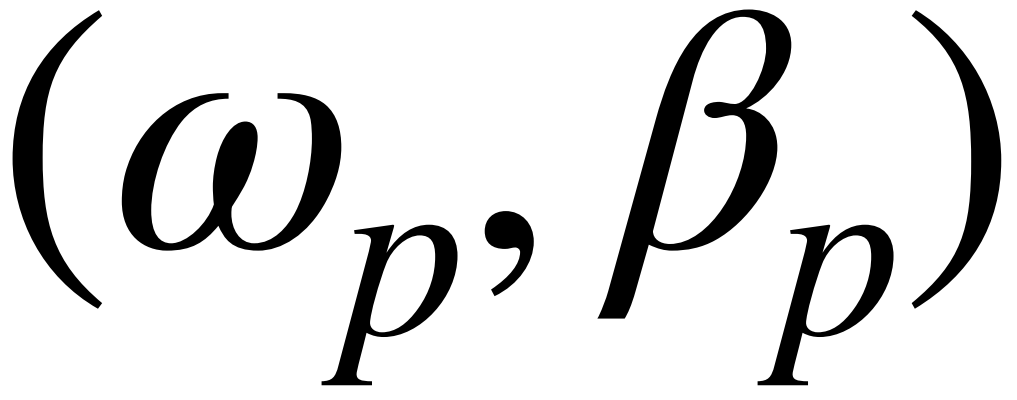




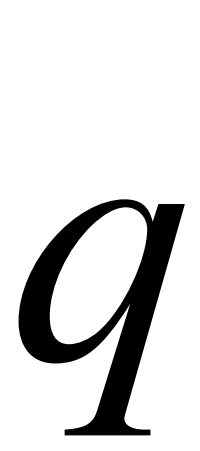
Optical wavevector,



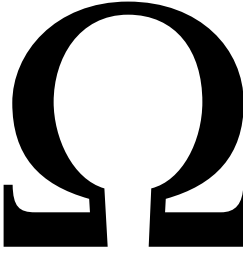
Optical frequency,



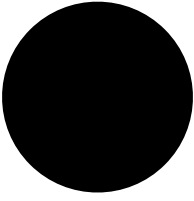
Mechanical wavevector,

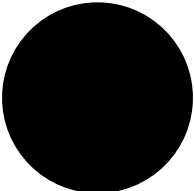


Mech. frequency,



$$q_S = q_{aS}$$

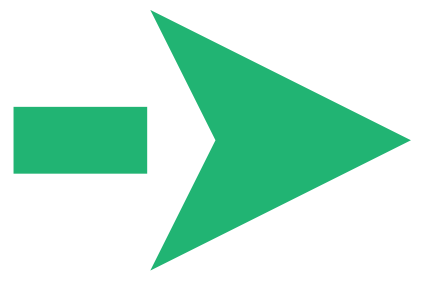


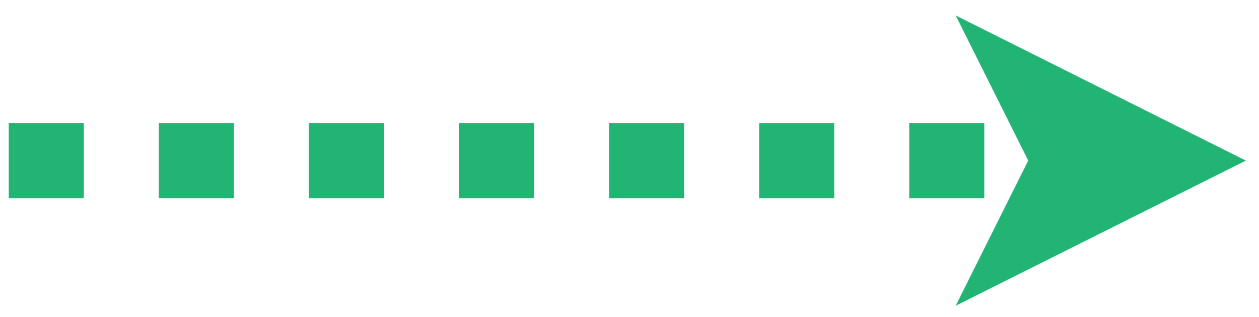


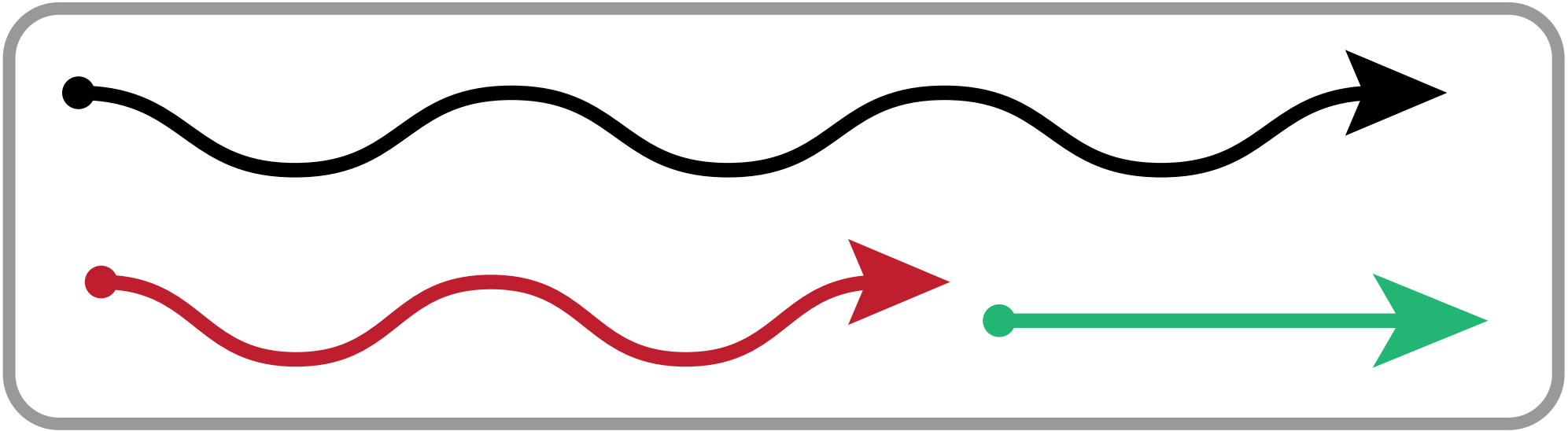
qaS

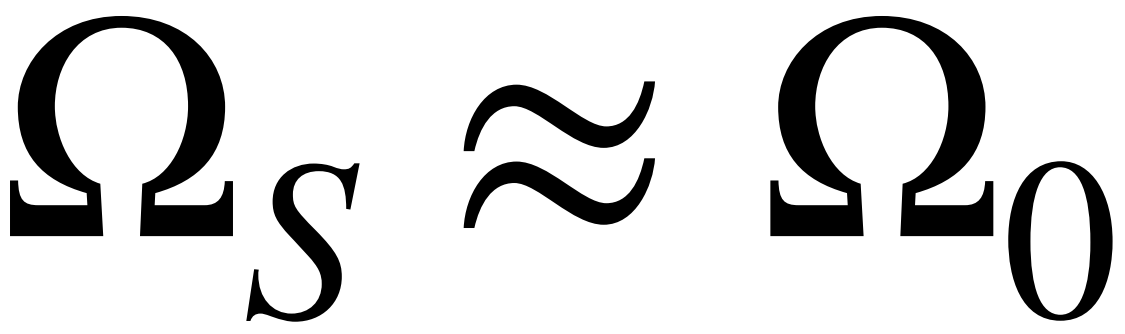
$$\Omega_S \approx \frac{v_{ac}}{c}\omega_p(n_{eff}^{(p)} - n_{eff}^{(s)})$$

$$q_S = +(|k_p| - |k_S|) \neq 0$$

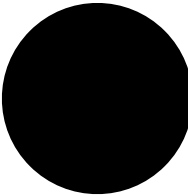
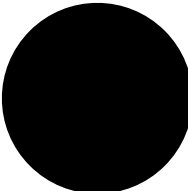
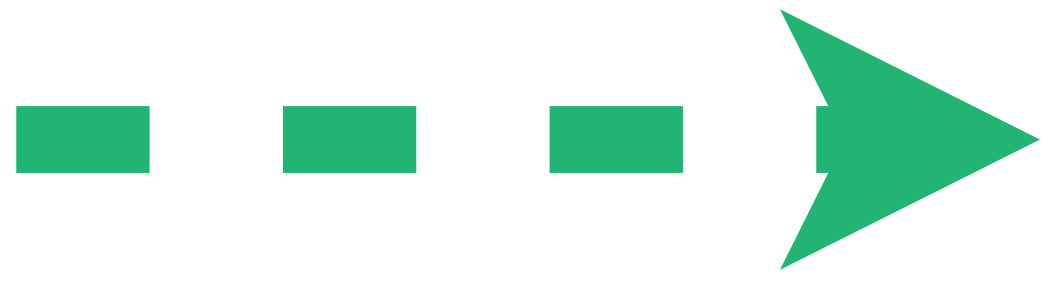








$$q_S = +\left(|k_p| - |k_S|\right) \approx 0$$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