

$$\Omega(p, k) = \Omega_{\text{hard}}(p, k) + \Omega_{\text{soft}}(p, k)$$

$$\Omega_{\text{hard}}^{(2\text{d})}(z, \bar{z}) \equiv \lim_{\epsilon \rightarrow 0} \Omega_{\text{hard}} = \Omega^{(2\text{d})}(z, \bar{z}) - \Omega_{\text{soft}}^{(2\text{d})}(z, \bar{z})$$