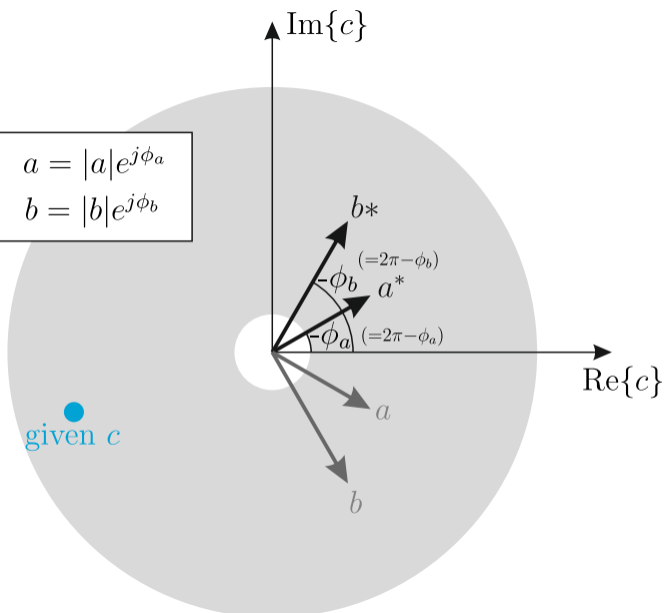
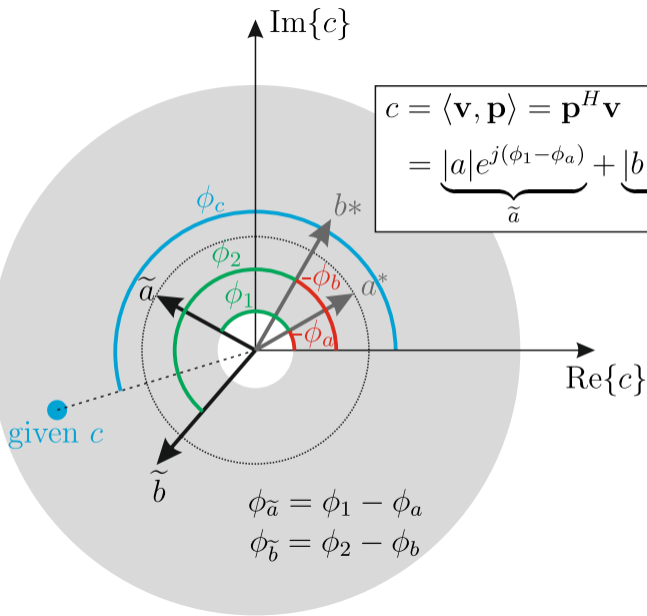


$$a = |a|e^{j\phi_a}$$
$$b = |b|e^{j\phi_b}$$

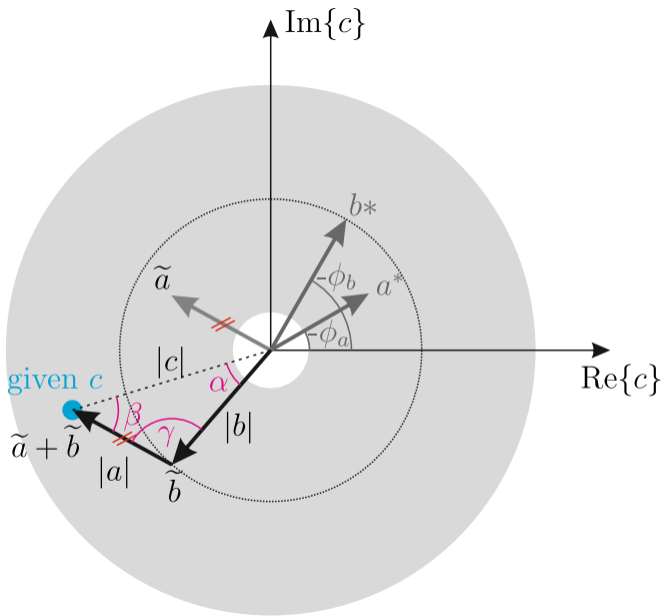


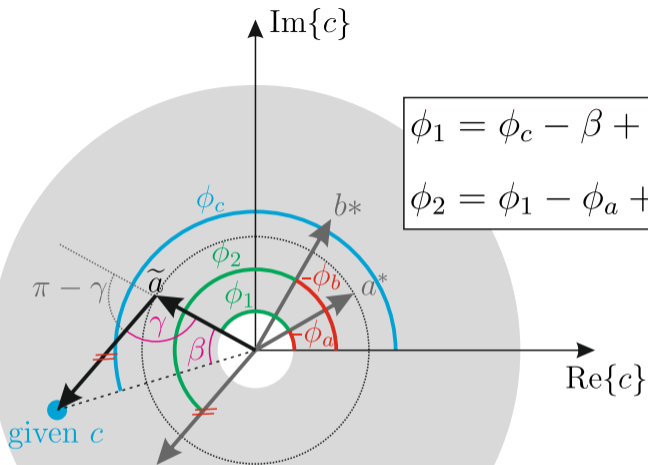


$$\begin{aligned}
 c &= \langle \mathbf{v}, \mathbf{p} \rangle = \mathbf{p}^H \mathbf{v} \\
 &= \underbrace{|a| e^{j(\phi_1 - \phi_a)}}_{\tilde{a}} + \underbrace{|b| e^{j(\phi_2 - \phi_b)}}_{\tilde{b}} = |c| e^{j\phi_c}
 \end{aligned}$$

$$\phi_{\tilde{a}} = \phi_1 - \phi_a$$

$$\phi_{\tilde{b}} = \phi_2 - \phi_b$$





$$\phi_1 = \phi_c - \beta + \phi_a$$

$$\phi_2 = \phi_1 - \phi_a + \pi - \gamma + \phi_b$$

$$\phi_{\tilde{a}} = \phi_1 - \phi_a$$

$$\phi_{\tilde{b}} = \phi_2 - \phi_b$$