A normalized RHP

α_1

α_2

α_3

β_1

β_2

$$\begin{bmatrix} 0 & 1 \\ 1 & 0 \end{bmatrix}$$

$$\begin{bmatrix} 0 & 1 \\ 1 & 0 \end{bmatrix}$$

$$\begin{bmatrix} 0 & e^{i\theta_1} \\ e^{-i\theta_1} & 0 \end{bmatrix}$$

$$\begin{bmatrix} 0 & e^{i\theta_2} \\ e^{-i\theta_2} & 0 \end{bmatrix}$$

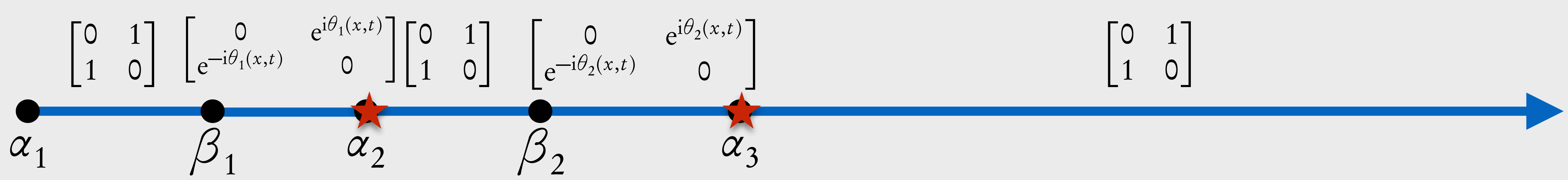
$$M(\lambda) = \check{\Psi}(\lambda) G(\lambda), \quad M(\lambda) = [1, 1](1 + o(1)).$$

$$\begin{bmatrix} 0 & e^{i\theta_2(x,t)} \\ e^{-i\theta_2(x,t)} & 0 \end{bmatrix}$$

$$\begin{bmatrix} 0 & e^{i\theta_1(x,t)} \\ e^{-i\theta_1(x,t)} & 0 \end{bmatrix}$$

A normalized RHP

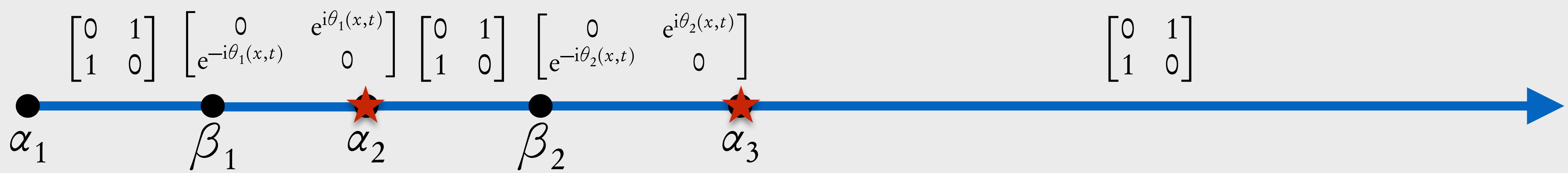
$$M(\lambda) = \check{\Psi}(\lambda) G(\lambda), \quad M(\lambda) = [1, 1](1 + o(1)).$$



An example

$$N(z) = \begin{cases} M(z^2) & \operatorname{Im} z > 0, \\ M(z^2)\begin{bmatrix} 0 & 1 \\ 1 & 0 \end{bmatrix} & \operatorname{Im} z < 0. \end{cases}$$

Suppose $\alpha_1 = 0$



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