

$\theta(t)$ is the parameterized curve for $0 < t < 2\pi$. $\theta(t)'$ is the curvature.

1 Noam box notes on board

$$\int_0^{2\pi} e^{i\theta(t)} dt = 0$$

$$\int_0^{2\pi} \theta(t) dt = 2\pi$$

Invertible: $\theta' \leftrightarrow -\theta'$

Minimum: $\int (\theta + \theta')^2 dt$

2 Noam high notes on board

$$\int_0^{2\pi} e^{2it} \overline{e^{i\theta(t)}} dt$$

$$\int_0^{2\pi} e^{i\theta(t)} dt = 0$$

$$\theta(t) \mapsto 2t - \theta(t)$$