

Def.: Given a one-step method with SF $g(z)$
 For $\lambda \in \mathbb{R}$ we call

$$SI = \{ x = h\lambda \in \mathbb{R} \mid |g(x)| < 1 \}$$

the method's stability interval (SI)

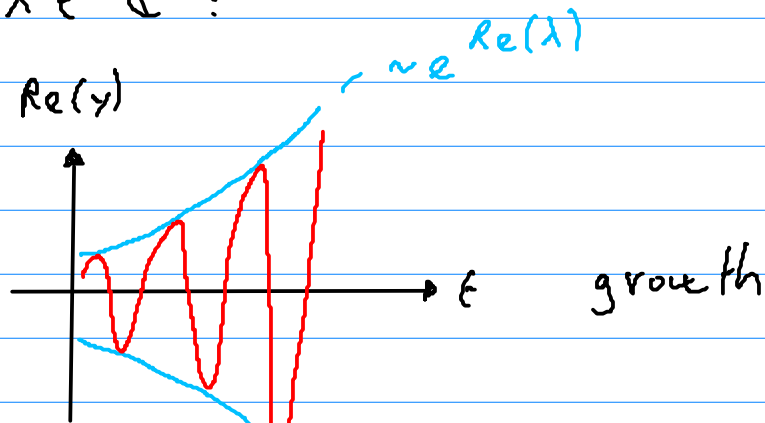
For $\lambda \in \mathbb{C}$ we call

$$SR = \{ z = h\lambda \in \mathbb{C} \mid |g(z)| < 1 \}$$

the method's stability region (SR)
 (or "domain")

In general $\lambda \in \mathbb{C}$:

(i) $\text{Re}(\lambda) > 0$



(ii) $\text{Re} < 0$

