

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)

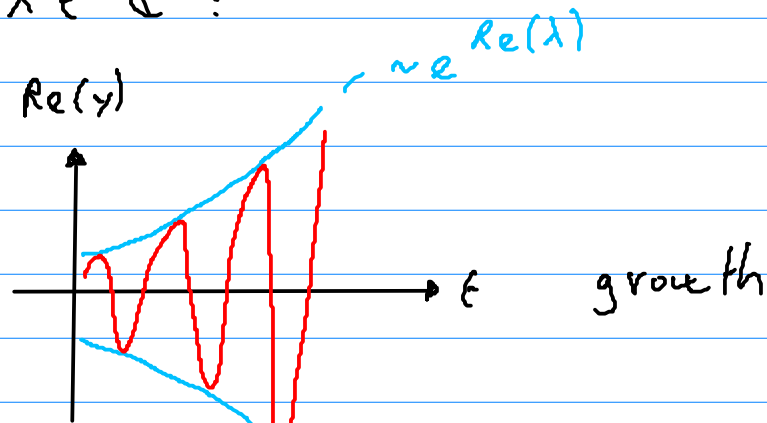
For  $\lambda \in \mathbb{C}$  we call

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

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

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

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



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

