

95. (Homework 7 - Dr. Curto) If  $f : G \rightarrow \mathbb{C}$  is analytic except for poles show that the poles of  $f$  cannot have a limit point in  $G$ .

Suppose the poles of  $f$  have a limit point  $a$ . Because  $a$  is a pole,  $f$  is analytic in a punctured neighborhood about  $a$ . But because  $a$  is a limit point of poles, all of its neighborhoods contain poles, so  $f$  is not analytic in any of them  $\hookrightarrow$

