

**Math 535: Complex Analysis – David Dumas – Spring 2016**

**Homework 13**

Due Monday, April 18 at 4:00pm

(—) From the textbook:

- Section 5.2.5(p206): #3
- Section 5.5.5(p227): #1, #2, #3

(P1) Let  $\Omega \subset \mathbb{C}$  be a region and fix a real number  $M > 0$ . Let  $\mathcal{F}$  be the set of all analytic functions in  $\Omega$  such that

$$\iint_{\Omega} |f(z)|^2 dx dy \leq M.$$

Show that  $\mathcal{F}$  is normal.