Notes on Topics in Analyis

Manjunath Krishnapur, Fall 2014 Indian Institute of Science

1 Isoperimetric Inequalities

${\bf Wiestrass\ Theorem:}$

If $f:[0,1]\to\mathbb{R}$ is a continuous function and $\epsilon>0$ then \exists a polynomial P such that $|f(x)-P(x)|<\epsilon \ \forall x\in[0,1].$