Empirical Relations for f_{peak} by ${\cal M}$ for Fixed $R_{1.6}$ 6.0 $\rm R_{1.6} = 10.00 \; km$ ${\rm R}_{\rm 1.6} = 11.00 \ \text{km}$ 5.5 ${\rm R}_{\rm 1.6} = 12.00 \ \text{km}$ ${
m R}_{1.6} = {
m 13.00~km}$ 5.0 - ${\rm R}_{\rm 1.6} = 14.00 \ \text{km}$ ${\rm R}_{\rm 1.6} = 15.00 \; \text{km}$ Sampled Relations 4.5 f_{peak} (kHz) 3.53.0 2.52.0 -1.5 1.2 1.0 1.6 1.8 1.4 \mathcal{M} (M_{\odot})