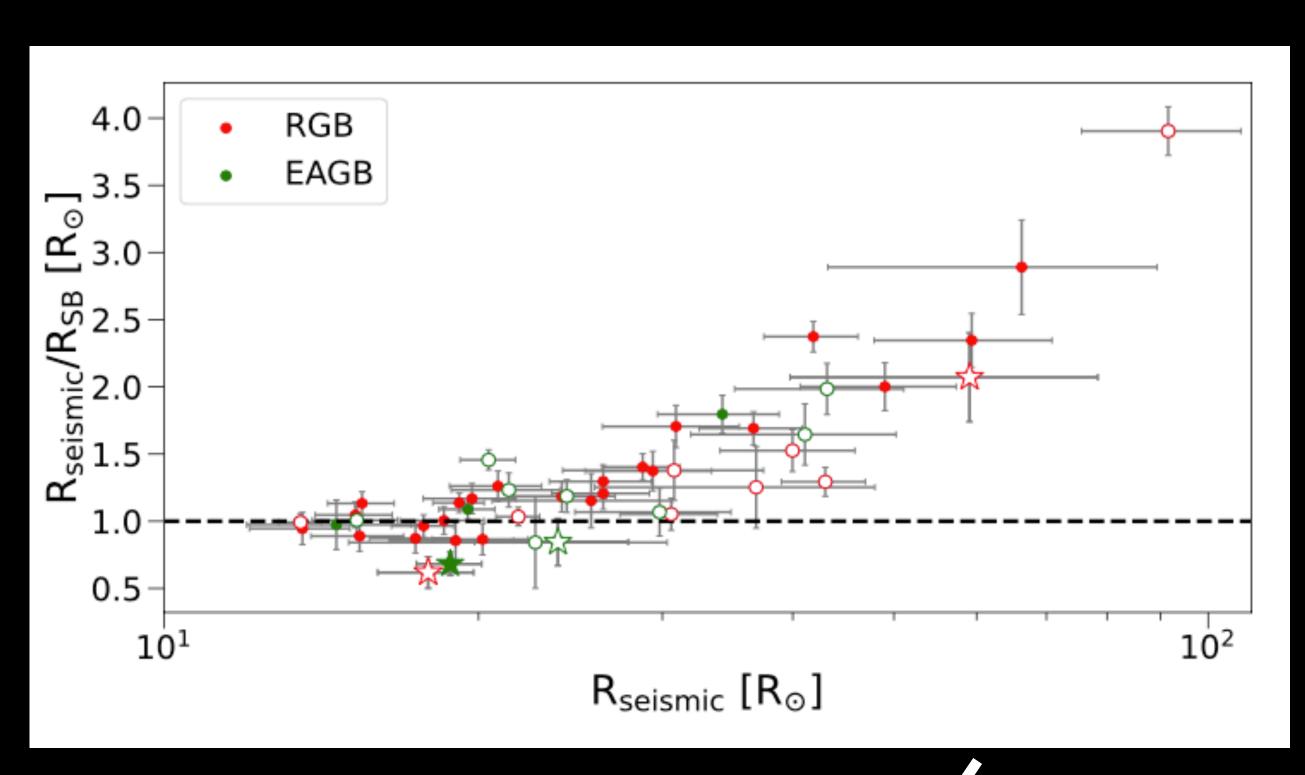
Seismic Quantities

Information that we can obtain







$$\begin{pmatrix} M \\ M_{\odot} \end{pmatrix} = \begin{pmatrix} \nu_{\text{max}} \end{pmatrix}^{3} \begin{pmatrix} \Delta \nu \\ \lambda \nu_{\odot} \end{pmatrix}^{-4} \begin{pmatrix} T_{\text{eff}} \\ T_{\text{eff}} \end{pmatrix}^{3/2}$$

$$\begin{pmatrix} M \\ M_{\odot} \end{pmatrix} = \begin{pmatrix} \Delta \nu \\ \Delta \nu_{\odot} \end{pmatrix}^{2} \begin{pmatrix} I \\ L_{\odot} \end{pmatrix}^{3/2} \begin{pmatrix} T_{\text{eff}} \\ T_{\text{eff},\odot} \end{pmatrix}^{-6}$$

$$\begin{pmatrix} M \\ M_{\odot} \end{pmatrix} \simeq \begin{pmatrix} \nu_{\text{max}} \\ \nu_{\text{max},\odot} \end{pmatrix} \begin{pmatrix} L \\ L_{\odot} \end{pmatrix} \begin{pmatrix} T_{\text{eff}} \\ T_{\text{eff},\odot} \end{pmatrix}^{-7/2}$$

$$\begin{pmatrix} M \\ M_{\odot} \end{pmatrix} \simeq \begin{pmatrix} \nu_{\text{max}} \\ \nu_{\text{max},\odot} \end{pmatrix}^{12/5} \begin{pmatrix} \Delta \nu \\ \lambda \nu_{\odot} \end{pmatrix}^{-14/5} \begin{pmatrix} I \\ L_{\odot} \end{pmatrix}^{3/10}$$

$$\begin{pmatrix} M \\ \nu_{\text{max},\odot} \end{pmatrix} \simeq \begin{pmatrix} \nu_{\text{max}} \\ \nu_{\text{max},\odot} \end{pmatrix}^{12/5} \begin{pmatrix} \Delta \nu \\ \nu_{\text{o}} \end{pmatrix}^{-14/5} \begin{pmatrix} I \\ \nu_{\text{o}} \end{pmatrix}^{3/10}$$

$$\begin{pmatrix} M \\ \nu_{\text{max},\odot} \end{pmatrix} \simeq \begin{pmatrix} \nu_{\text{max}} \\ \nu_{\text{max},\odot} \end{pmatrix}^{12/5} \begin{pmatrix} \Delta \nu \\ \nu_{\text{o}} \end{pmatrix}^{-14/5} \begin{pmatrix} I \\ \nu_{\text{o}} \end{pmatrix}^{3/10}$$

$$\begin{pmatrix} M \\ \nu_{\text{max},\odot} \end{pmatrix} \simeq \begin{pmatrix} \nu_{\text{max}} \\ \nu_{\text{max},\odot} \end{pmatrix}^{12/5} \begin{pmatrix} \Delta \nu \\ \nu_{\text{o}} \end{pmatrix}^{-14/5} \begin{pmatrix} I \\ \nu_{\text{o}} \end{pmatrix}^{3/10}$$

$$\begin{pmatrix} M \\ \nu_{\text{max},\odot} \end{pmatrix} \simeq \begin{pmatrix} \nu_{\text{max}} \\ \nu_{\text{max},\odot} \end{pmatrix}^{12/5} \begin{pmatrix} \Delta \nu \\ \nu_{\text{o}} \end{pmatrix}^{-14/5} \begin{pmatrix} I \\ \nu_{\text{o}} \end{pmatrix}^{3/10}$$

$$\begin{pmatrix} M \\ \nu_{\text{max},\odot} \end{pmatrix} \simeq \begin{pmatrix} \nu_{\text{max}} \\ \nu_{\text{max},\odot} \end{pmatrix}^{12/5} \begin{pmatrix} \Delta \nu \\ \nu_{\text{o}} \end{pmatrix}^{-14/5} \begin{pmatrix} I \\ \nu_{\text{o}} \end{pmatrix}^{3/10}$$

$$\begin{pmatrix} M \\ \nu_{\text{max},\odot} \end{pmatrix} \simeq \begin{pmatrix} \nu_{\text{max}} \\ \nu_{\text{max},\odot} \end{pmatrix}^{12/5} \begin{pmatrix} \Delta \nu \\ \nu_{\text{o}} \end{pmatrix}^{-14/5} \begin{pmatrix} I \\ \nu_{\text{o}} \end{pmatrix}^{3/10}$$

$$\begin{pmatrix} M \\ \nu_{\text{max},\odot} \end{pmatrix} \simeq \begin{pmatrix} \nu_{\text{max}} \\ \nu_{\text{max},\odot} \end{pmatrix}^{12/5} \begin{pmatrix} \Delta \nu \\ \nu_{\text{o}} \end{pmatrix}^{-14/5} \begin{pmatrix} I \\ \nu_{\text{o}} \end{pmatrix}^{3/10}$$

$$\begin{pmatrix} M \\ \nu_{\text{o}} \end{pmatrix} \simeq \begin{pmatrix} \nu_{\text{max}} \\ \nu_{\text{o}} \end{pmatrix}^{12/5} \begin{pmatrix} \Delta \nu \\ \nu_{\text{o}} \end{pmatrix}^{-14/5} \begin{pmatrix} I \\ \nu_{\text{o}} \end{pmatrix}^{3/10}$$

$$\begin{pmatrix} M \\ \nu_{\text{o}} \end{pmatrix} \simeq \begin{pmatrix} \nu_{\text{max}} \\ \nu_{\text{o}} \end{pmatrix}^{12/5} \begin{pmatrix} \Delta \nu \\ \nu_{\text{o}} \end{pmatrix}^{-14/5} \begin{pmatrix} I \\ \nu_{\text{o}} \end{pmatrix}^{3/10}$$

$$\begin{pmatrix} M \\ \nu_{\text{o}} \end{pmatrix} \simeq \begin{pmatrix} \nu_{\text{max}} \\ \nu_{\text{o}} \end{pmatrix}^{-14/5} \begin{pmatrix} I \\ \nu_{\text{o}} \end{pmatrix}^{-14/5} \begin{pmatrix} I \\ \nu_{\text{o}} \end{pmatrix}^{-14/5} \begin{pmatrix} I \\ \nu_{\text{o}} \end{pmatrix}^{-14/5}$$

$$\begin{pmatrix} M \\ \nu_{\text{o}} \end{pmatrix} \simeq \begin{pmatrix} \nu_{\text{max}} \\ \nu_{\text{o}} \end{pmatrix}^{-14/5} \begin{pmatrix} I \\ \nu_{\text{o}} \end{pmatrix}^{-14/5} \begin{pmatrix} I \\ \nu_{\text{o}} \end{pmatrix}^{-14/5} \begin{pmatrix} I \\ \nu_{\text{o}} \end{pmatrix}^{-14/5}$$

$$\begin{pmatrix} M \\ \nu_{\text{o}} \end{pmatrix} \simeq \begin{pmatrix} \nu_{\text{o}} \\ \nu_{\text{o}} \end{pmatrix}^{-14/5} \begin{pmatrix} I \\ \nu_{\text{o}} \end{pmatrix}^{-14$$

$$\left(\frac{R}{R_{\odot}}\right) \simeq \left(\frac{\nu_{\text{max}}}{\nu_{\text{max},\odot}}\right) \left(\frac{\Delta \nu}{\Delta \nu_{\odot}}\right)^{-2} \left(\frac{T_{\text{eff}}}{T_{\text{eff},\odot}}\right)^{1/2}$$

$$R_{SB} = \left(\frac{L}{4\pi\sigma T^4}\right)^{1/2}$$

Masses

On RGB and E-AGB

- They found that the distribution of masses in RGB is slightly skewed, so here it's shown the mode
- The symbols of stars are thought to be result of merger events or miss classified objects, and won't be used for the rest of the analysis

