

Examples

1 Tabular Environment

1.1 Wording:

For tables, the alt text begins by stating the amount of columns and rows within in the table. Each element within the row is then read out, separated by 'and'. The next row is indicated by 'new row', and the process repeats until all the rows have been read out.

1.2 Typeset Requirements:

The code requires the column specification to be formatted in a particular way. Each column should be indicated by a 'c', with or without '|' between. As well as this, cells shouldn't contain multi-line expressions.

1.3 Example:

```
\begin{center}
\begin{tabular}{||c c c c||}
\hline
Species & Nucleons & Free Particles &  $\mu$  \\ \hline
neutral (bound) Hydrogen & 1 & 1 & 1 \\ \hline
ionised Hydrogen ( $H^+$ ) & 1 & 2 &  $\frac{1}{2}$  \\ \hline
neutral Helium & 4 & 1 & 4 \\ \hline
ionised Helium ( $He^+$ ) & 4 & 2 & 2 \\ \hline
 $He^{++}$  & 4 & 3 &  $\frac{4}{3}$  \\ \hline
ionised metal (atomic number Z) &  $\approx 2Z$  &  $Z+1$  &  $\frac{2Z}{Z+1} \approx 2$  \\ \hline
\end{tabular}
\end{center}
```

| Species | Nucleons | Free Particles | μ |
|---------------------------------|--------------|----------------|----------------------------|
| neutral (bound) Hydrogen | 1 | 1 | 1 |
| ionised Hydrogen (H^+) | 1 | 2 | $\frac{1}{2}$ |
| neutral Helium | 4 | 1 | 4 |
| ionised Helium (He^+) | 4 | 2 | 2 |
| He^{++} | 4 | 3 | $\frac{4}{3}$ |
| ionised metal (atomic number Z) | $\approx 2Z$ | $Z+1$ | $\frac{2Z}{Z+1} \approx 2$ |

begin alt text. Table with 4 columns and 7 rows. Species and Nucleons and Free Particles and mu next row neutral (bound) Hydrogen and 1 and 1 and 1 next row ionised Hydrogen (H superscript +) and 1 and 2 and 1 over 2 end fraction next row neutral Helium and 4 and 1 and 4 next row ionised Helium (He superscript +) and 4 and 2 and 2 next row He superscript (++) and 4 and 3 and 4 over 3 end fraction next row ionised metal (atomic number Z) and is approximately equal to 2Z and Z+1 and fraction with numerator 2 uppercase Z and denominator uppercase Z+1 end fraction is approximately equal to 2 end alt text

2 Array Environment

2.1 Wording:

For the array environment, the alt text begins and ends with 'begin array environment' and 'end array environment' respectively. The code is specifically set up to deal with piecewise functions, hence adding 'for' to indicate the conditions of the function. Newlines within the environment, indicated with '\\ ' has the phrasing 'newline' in the alt text.

2.2 Example:

```
\begin{equation}
  f(x) = \left\{
    \begin{array}{cc}
      t^2 - 5t, & t \leq -10 \\
      t + 19, & -10 < t < -2 \\
      \frac{t^3}{t+9}, & t \geq -2
    \end{array}
  \right.
\end{equation}
```

$$f(x) = \begin{cases} t^2 - 5t, & t \leq -10 \\ t + 19, & -10 < t < -2 \\ \frac{t^3}{t+9}, & t \geq -2 \end{cases} \quad (1)$$

begin alt text f (x) = Begin array environment. t superscript 2 minus 5 t , for t less than or equal to minus 10 and t + 19 , for minus 10 less than t less than minus 2 and fraction with numerator t superscript 3 and denominator t+9 end fraction , for t greater than or equal to minus 2 End array environment. . end alt text

3 Align Environment

3.1 Wording:

The alt text is created as normal, with the usual wording, for each line. The only difference in the align environment is that when the newline command is called, 'newline' is added to alt text.

3.2 Example:

```
\begin{align}
y &= \ln(x) \\
&\implies e^y = x \\
&\implies \frac{d}{dx} e^y = \frac{d}{dx} x \\
\frac{dy}{dx} e^y &= 1 \\
\frac{dy}{dx} &= \frac{1}{e^y} \\
&= \frac{1}{x}
\end{align}
```

$$y = \ln(x) \tag{2}$$

$$\implies e^y = x \tag{3}$$

$$\implies \frac{d}{dx} e^y = \frac{d}{dx} x \tag{4}$$

$$\frac{dy}{dx} e^y = 1 \tag{5}$$

$$\frac{dy}{dx} = \frac{1}{e^y} \tag{6}$$

$$= \frac{1}{x} \tag{7}$$

begin alt text y = natural logarithm of (x) newline implies e superscript y = x newline implies d over dx
end fraction e superscript y = d over dx end fraction x newline dy over dx end fraction e superscript y = 1
newline dy over dx end fraction = fraction with numerator 1 and denominator e superscript y end fraction
newline = 1 over x end fraction end alt text

4 Figure Captions

4.1 Wording:

This is to demonstrate that the alt text also works in figure captions. The width of the alt text box is adjusted to be smaller when the caption is part of a subfigure. This also works for section titles.

4.2 Example:

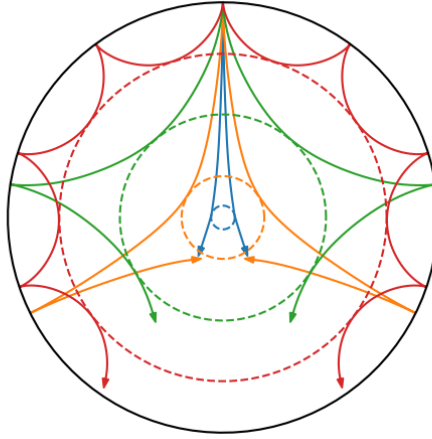


Figure 1: Propagation of acoustic modes of varying angular degree: $l = 1$ (blue), $l = 5$ (orange), $l = 20$ (green) and $l = 50$ (red), reflecting off the stellar surface (black). Solid lines represent the path of propagation, while dashed lines represent the maximum penetration depth of the respective mode.

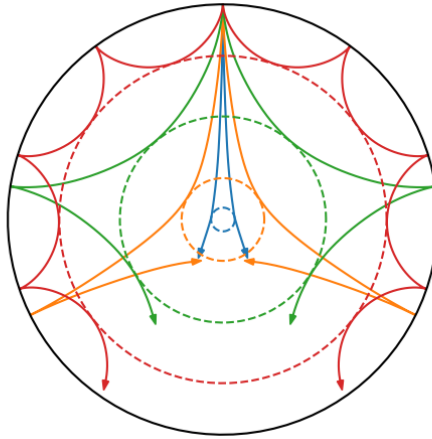


Figure 2: Propagation of acoustic modes of varying angular degree: $l = 1$

(blue), $l = 5$

(orange), $l = 20$

(green) and $l = 50$

(red), reflecting off the stellar surface (black). Solid lines represent the path of propagation, while dashed lines

represent the maximum penetration depth of the respective mode.