

$$H1(f, f_n, \zeta, A) := \left| \begin{array}{l} r \leftarrow \frac{f}{f_n} \\ \\ \frac{A}{\sqrt{(1 - r^2)^2 + (2 \cdot \zeta \cdot r)^2}} \end{array} \right.$$

fstart := 10      fend := 2000

Frequency range of interest      frg := fstart, fstart + 1 .. fend

$$fnv := (25 \ 100 \ 500)^T \quad dv := (0.02 \ 0.02 \ 0.02)^T \quad amp := (1.1 \ .2 \ .01)^T$$

$$PSD(f, fnv, dv, amp, j) := \sum_{i=0}^j H1(f, fnv_i, dv_i, amp_i)^2$$

