DIII-D Discharge 169466

1 Llama Data

Figure 1 shows the following fit to the Llama data:

$$n_n(R) = \frac{n_n}{1 + (R - R_{\rm sep})^2/L^2}, \tag{1}$$

where $n_n = 1.4 \times 10^{17}\,\mathrm{m}^{-3}$, $L = 0.015\,\mathrm{m}$, $R_{\rm sep} = 1.92\,\mathrm{m}$.

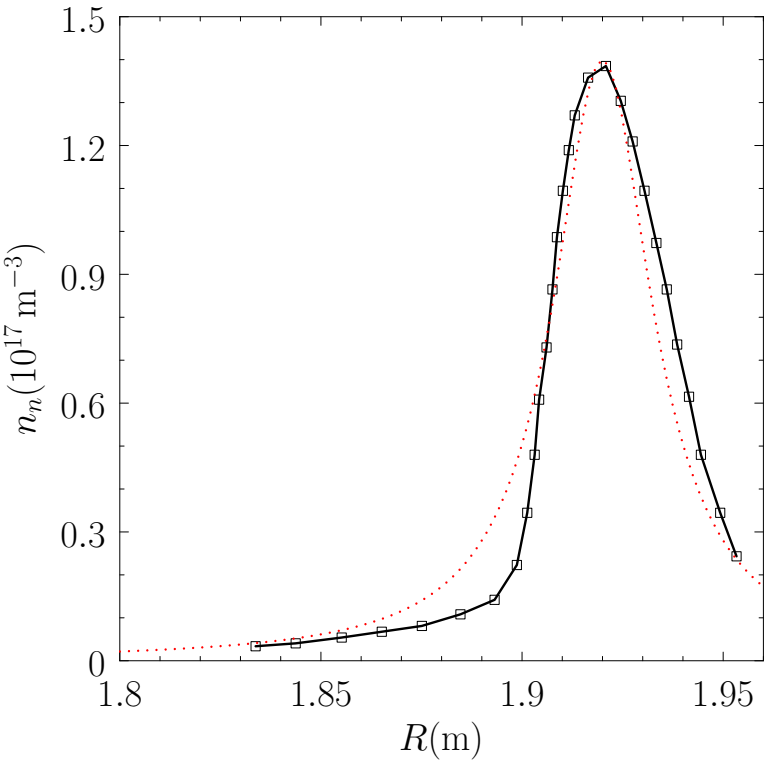

Figure 1: Fit to Llama data. Black: Data points. Red: Fit.

2 Natural Frequencies

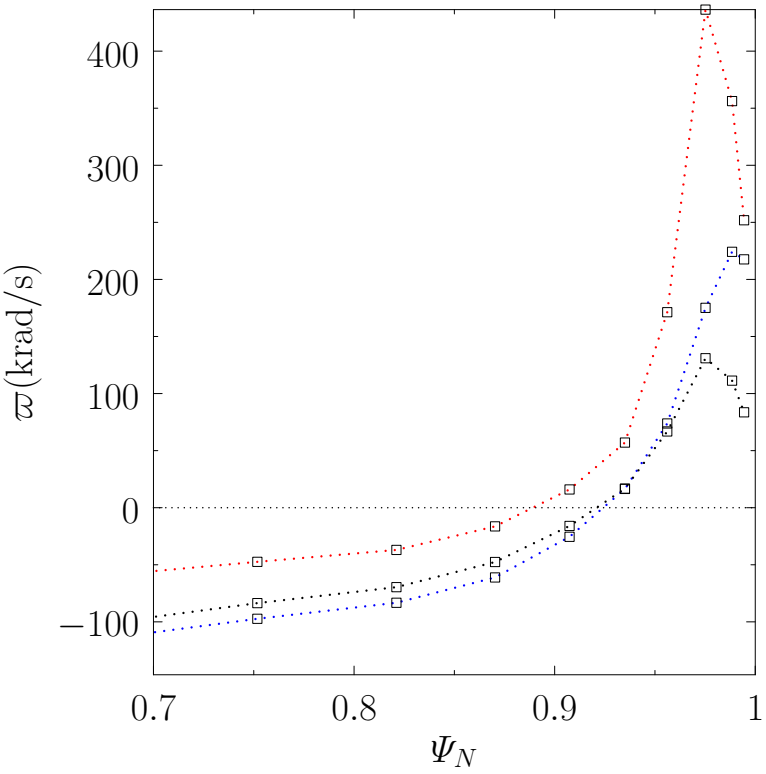

Figure 2: Natural frequencies at $t = 3200$ ms. Red: Linear natural frequency. Blue: Nonlinear natural frequency. Black: $\mathbf{E} \times \mathbf{B}$ frequency.

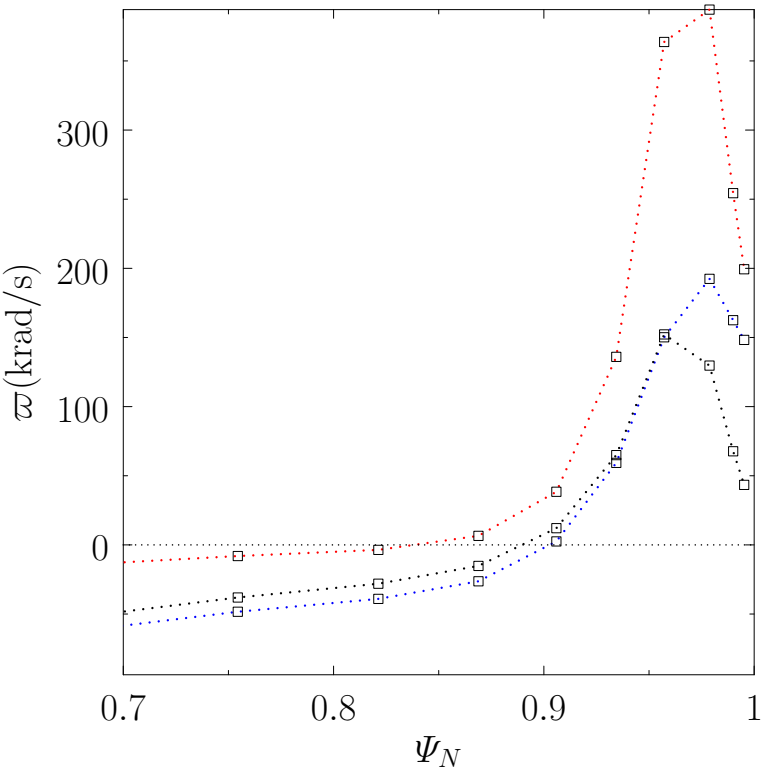

Figure 3: Natural frequencies at $t = 3600$ ms. Red: Linear natural frequency. Blue: Nonlinear natural frequency. Black: $\mathbf{E} \times \mathbf{B}$ frequency.