



Fig. 3. JUMPS AT RESONANCE: A plot of the orbital evolution determined by equations (2b,c and 3) with the parameters $\beta = 10^{-4}$; $A_1 = A_2 = 1$; $\dot{n}_{drag} = -10^{-6}n'^2$. Initial conditions are $n = 1.97n'$, $e = 0$, and $\phi = 0$. Notice that the jumps in semimajor axis and eccentricity occur simultaneously near $n \sim 2n'$ as required by equations (6) and (9). The resonant argument ϕ librates around a value near 180° until the jumps occur after which it circulates.