$\Delta a_0 = 0.0003$ \times \times \times \times \times \times \times 10^{-8} X X X 690 ring mass 455 10^{-9} 340 225 240 X X X \times \times \times 10^{-10} 10^{-10} 10^{-12} 10^{-11} viscosity v_s