AMATH 481/581 - Autumn 2022 Homework #2

Mastery of creating 3D plots.

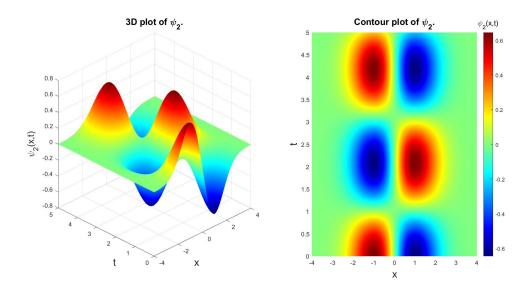


Fig. 1: 3D plot (left) and contour plot (right) of the evolution of the mode ψ_2 of the probability function over time t in a harmonic trapping potential using the second smallest eigenvalue and it's respective eigenfunction. Here $x \in [-4, 4]$ and $t \in [0, 5]$.