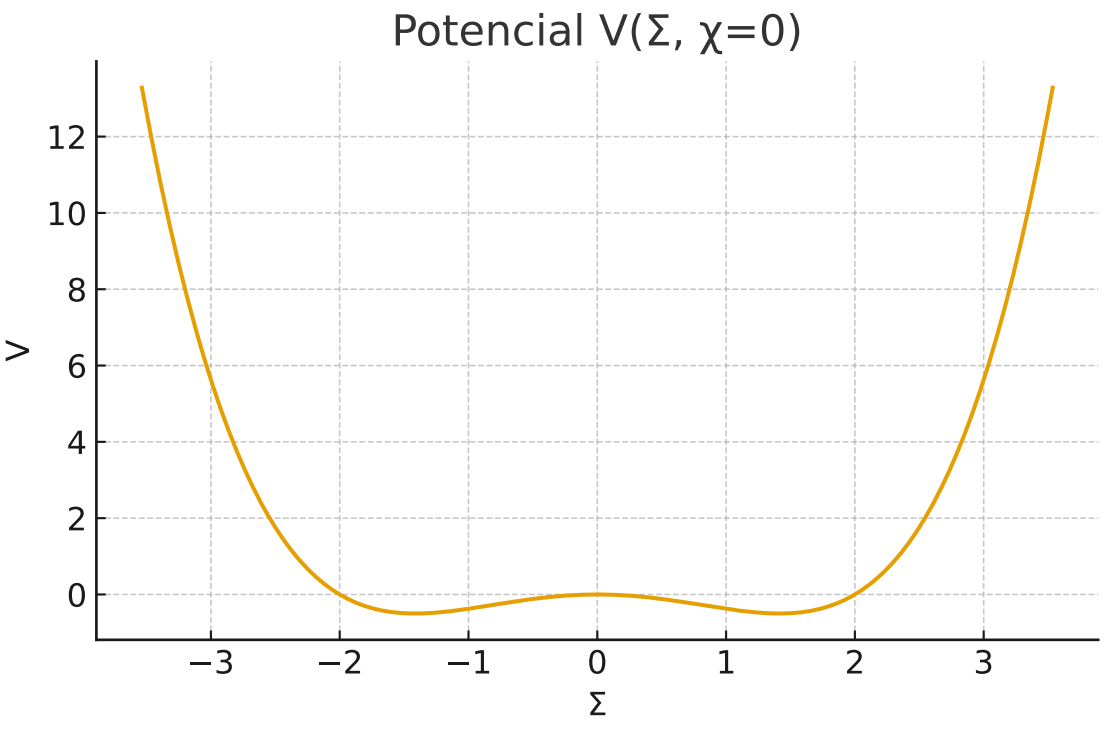
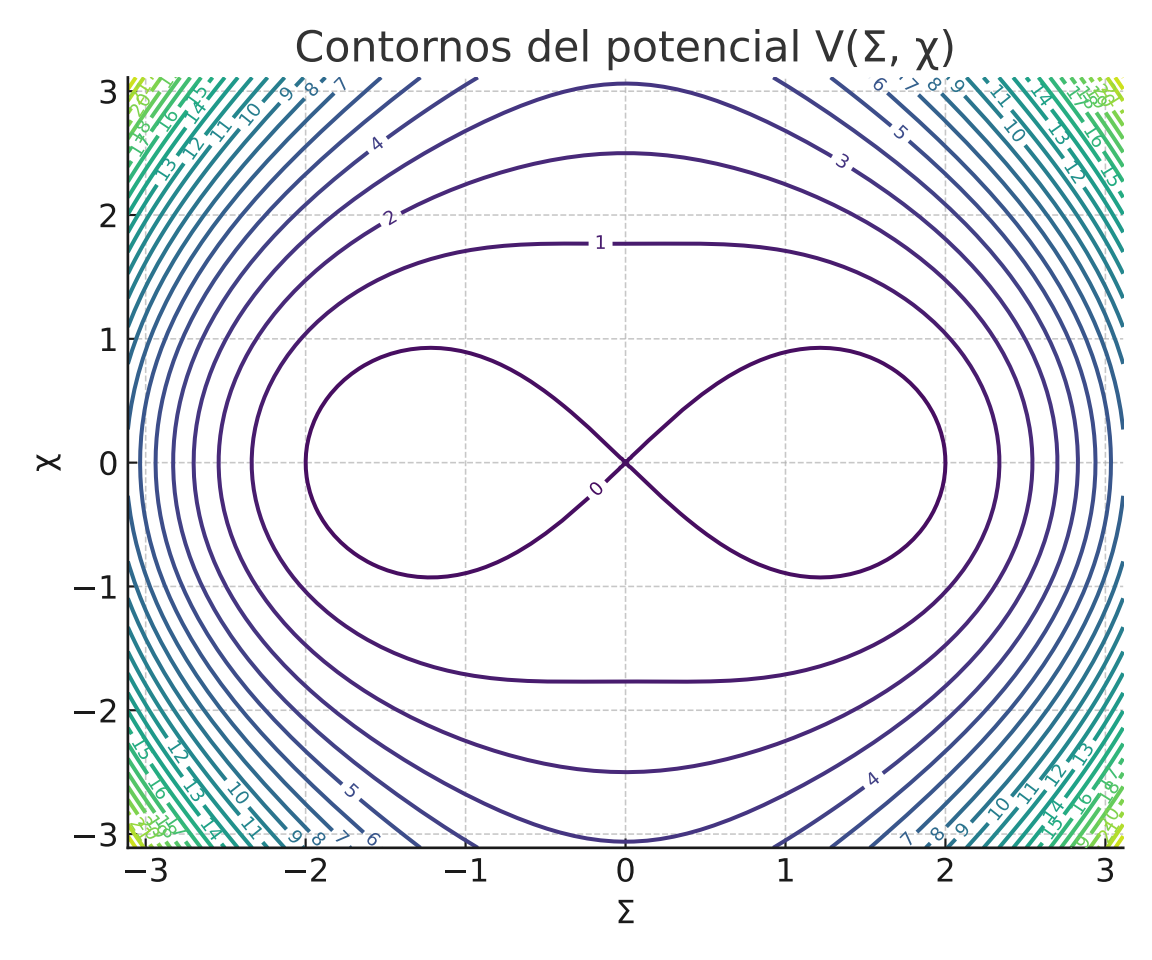
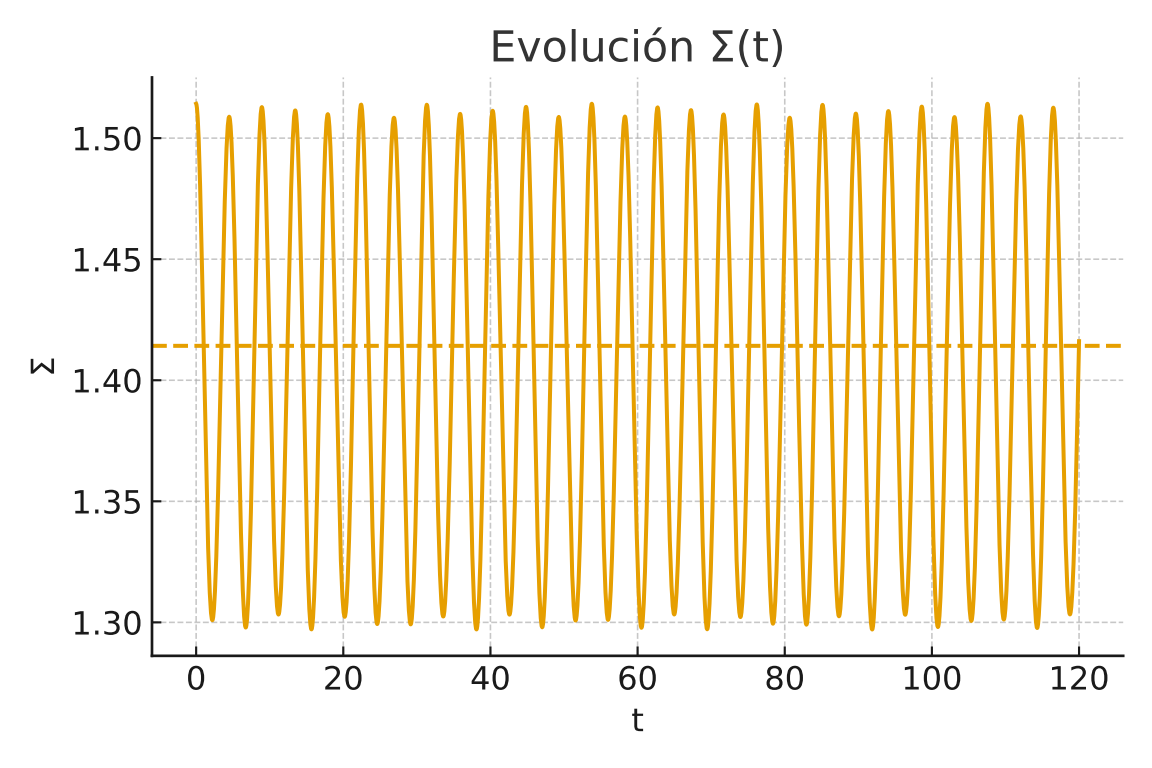
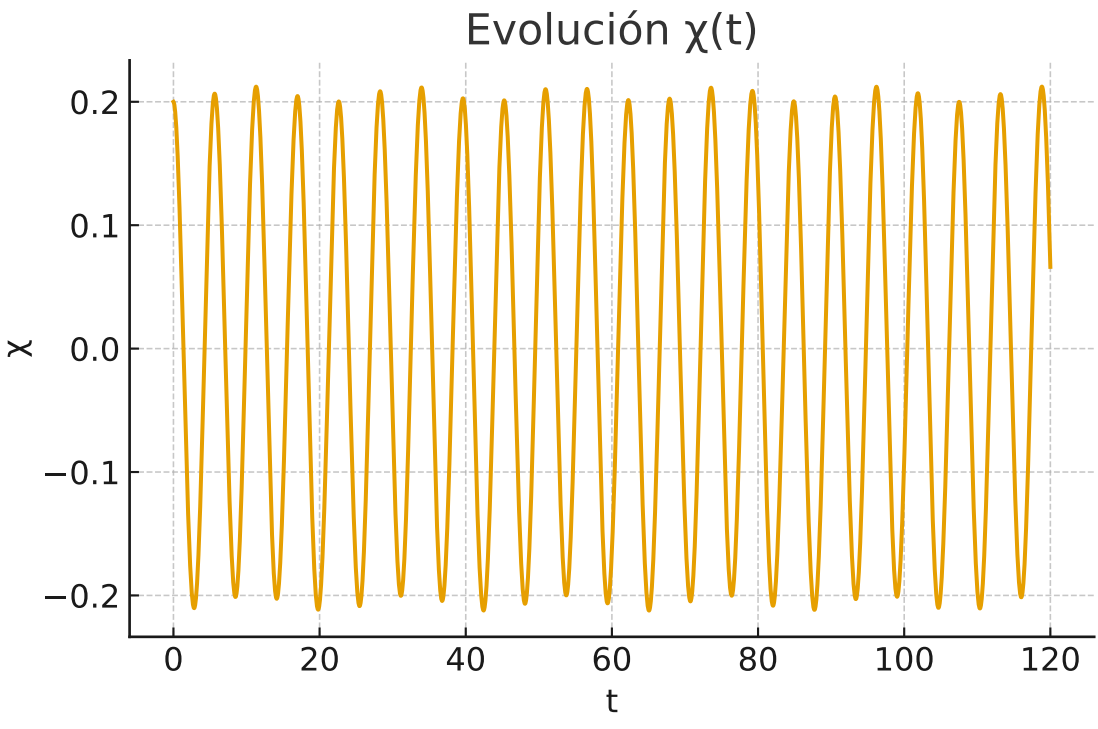
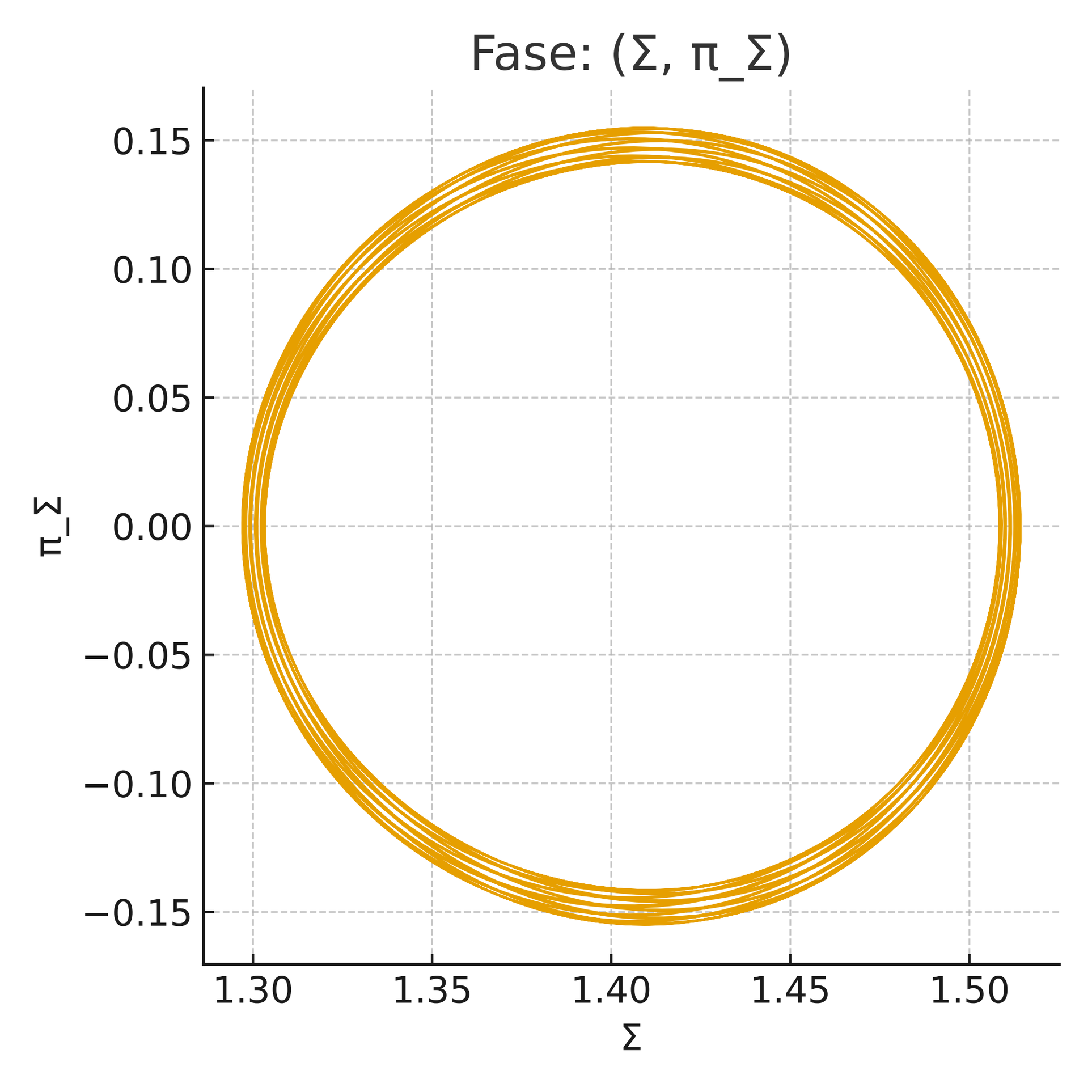
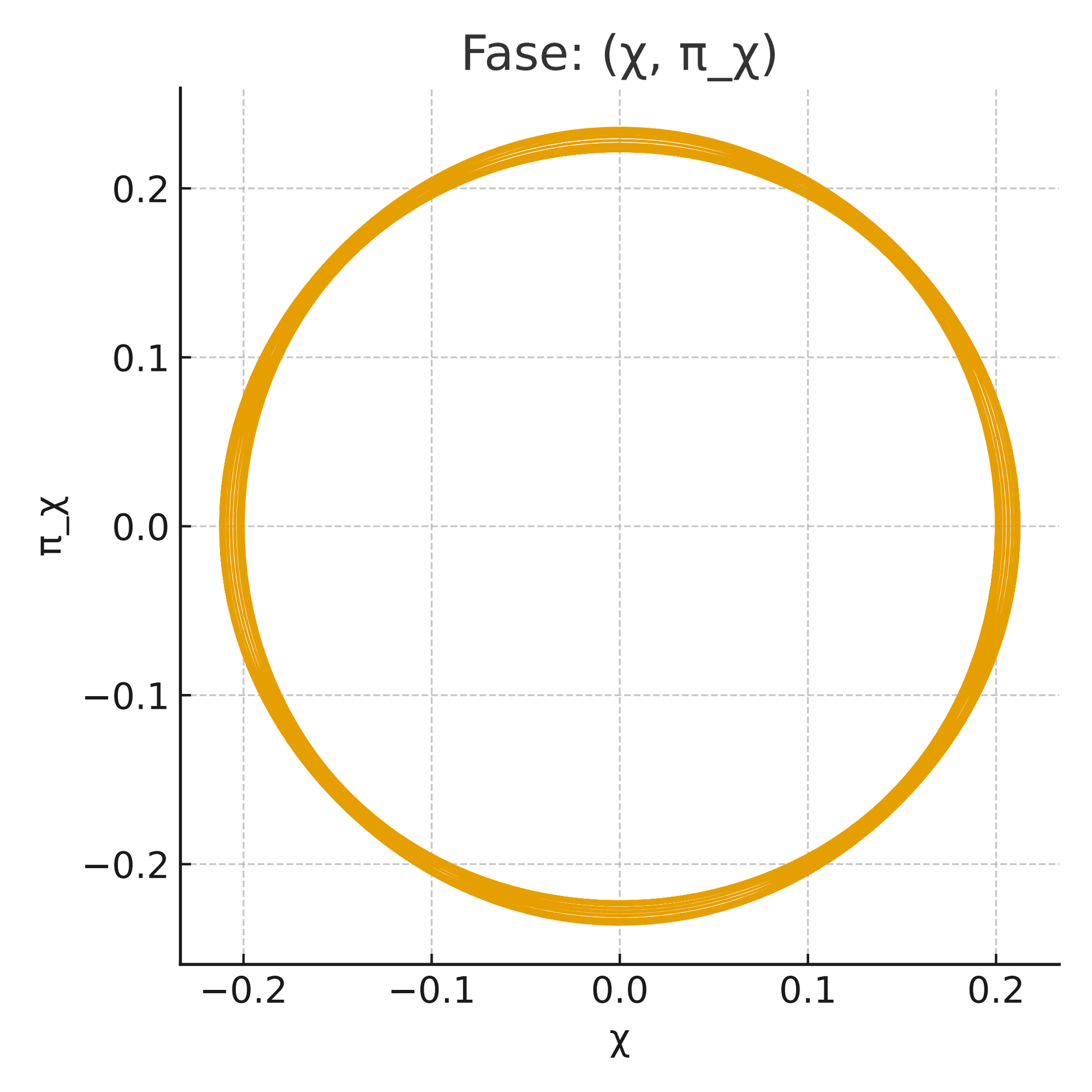

Potencial V(Σ, χ=0)
V
Σ
12
10
8
6
4
2
0
−3
−2
−1
0
1
2
3

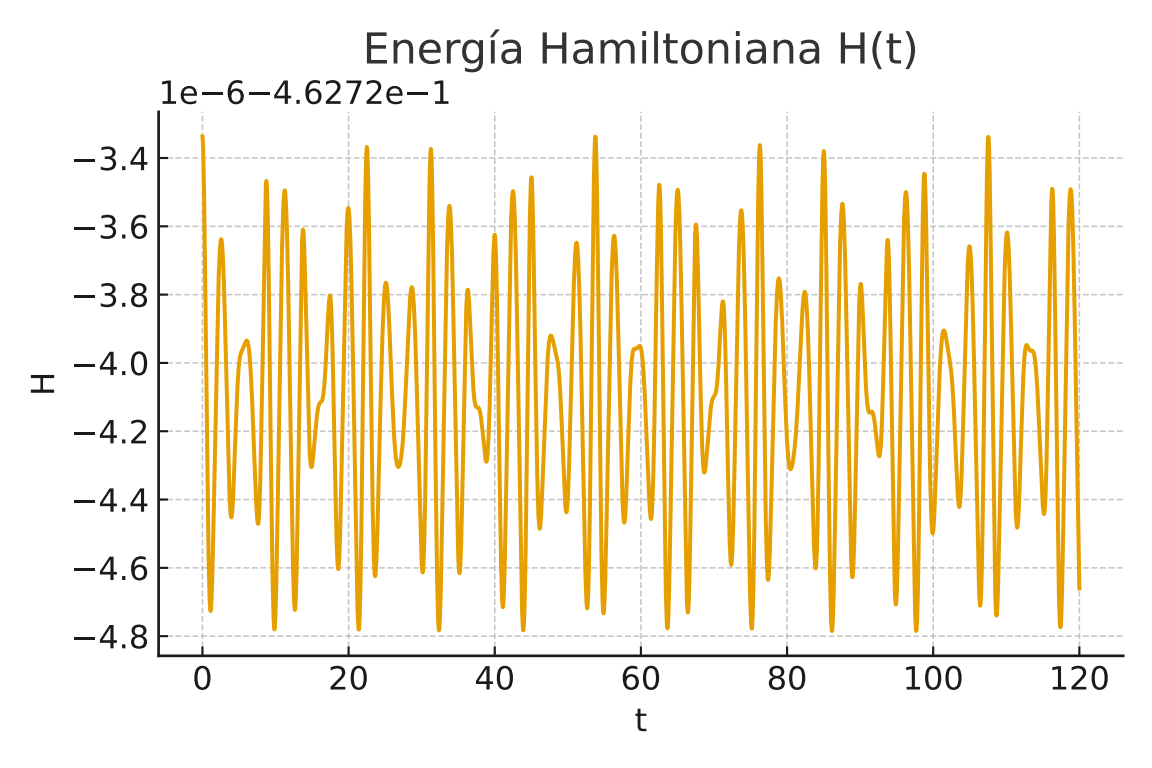

Contornos del potencial V(Σ, χ)
χ
Σ
3
2
1
0
−1
−2
−3
−3
−2
−1
0
1
2
3

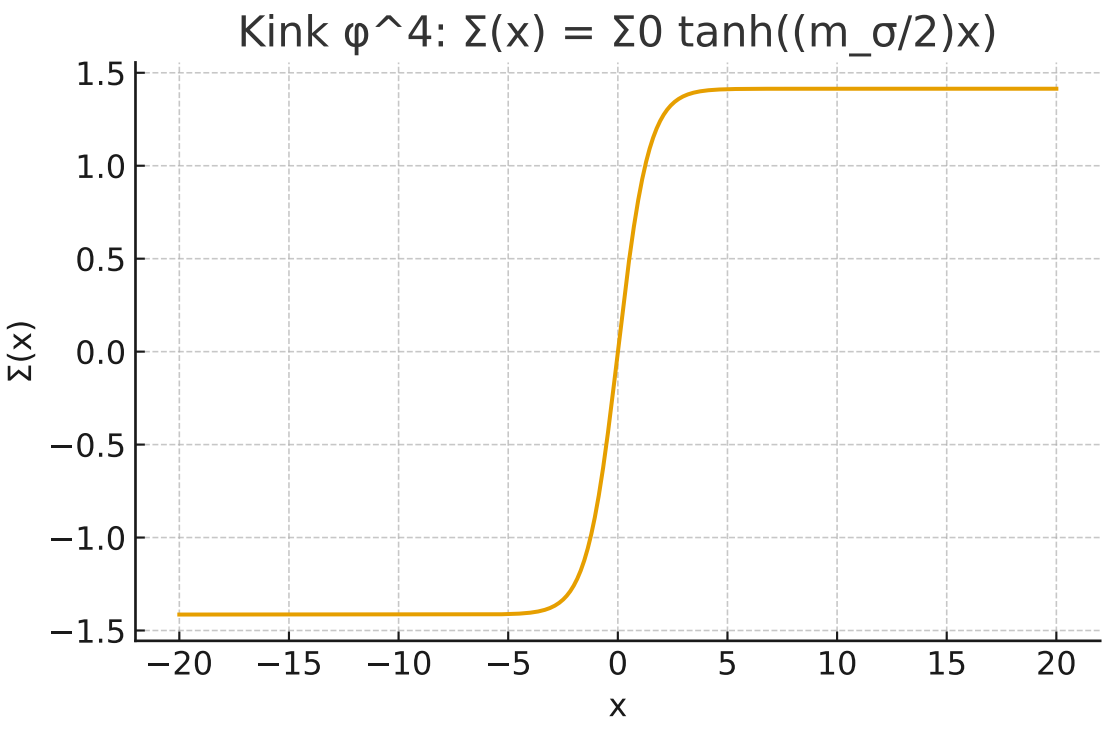

Evolución Σ(t)
1.50
1.45
1.40
1.35
1.30
Σ
0
20
40
60
80
100
120
t

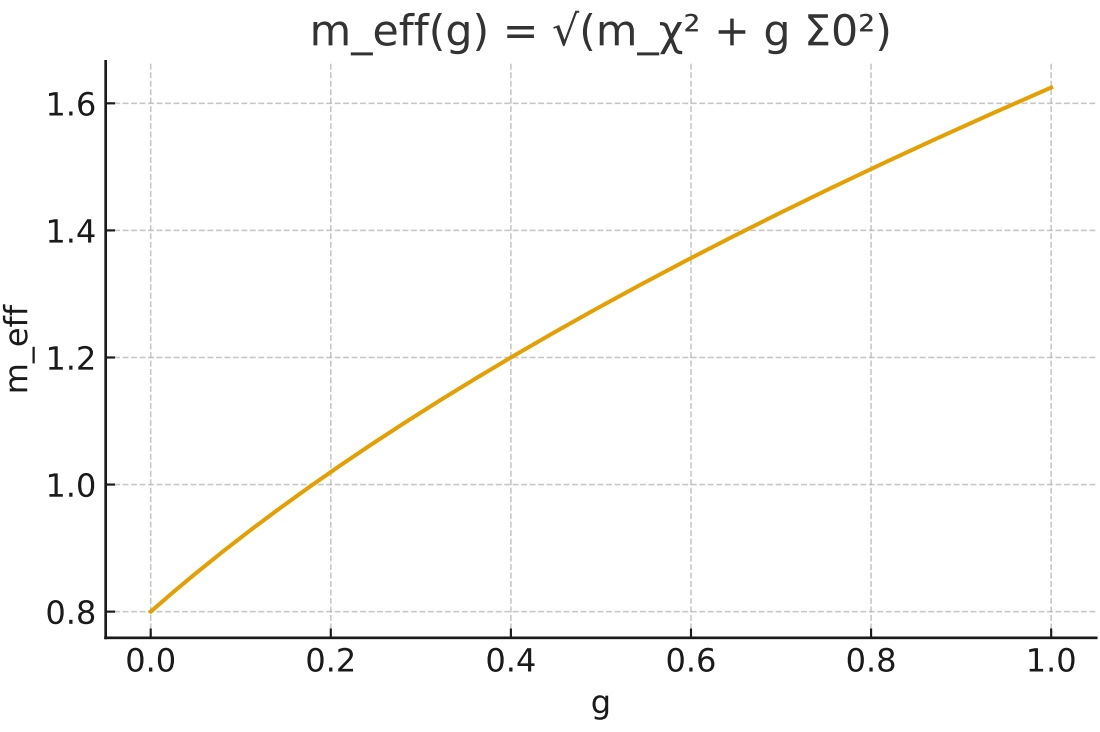

Evolución χ(t)
0.2
0.1
0.0
−0.1
−0.2
χ
0
20
40
60
80
100
120
t


Fase: (Σ, π_Σ)
0.15
0.10
0.05
0.00
−0.05
−0.10
−0.15
π_Σ
1.30
1.35
1.40
1.45
1.50
Σ


Fase: (χ, π_χ)
0.2
0.1
0.0
−0.1
−0.2
π_χ
−0.2
−0.1
0.0
0.1
0.2
χ


Energía Hamiltoniana H(t)
1e−6−4.6272e−1
−3.4
−3.6
−3.8
−4.0
−4.2
−4.4
−4.6
−4.8
H
0
20
40
60
80
100
120
t


Kink φ^4: Σ(x) = Σ0 tanh((m_σ/2)x)
Σ(x)
x
1.5
1.0
0.5
0.0
−0.5
−1.0
−1.5
−20
−15
−10
−5
0
5
10
15
20


m_eff(g) = √(m_χ² + g Σ0²)
m_eff
g
0.8
1.0
1.2
1.4
1.6
0.0
0.2
0.4
0.6
0.8
1.0