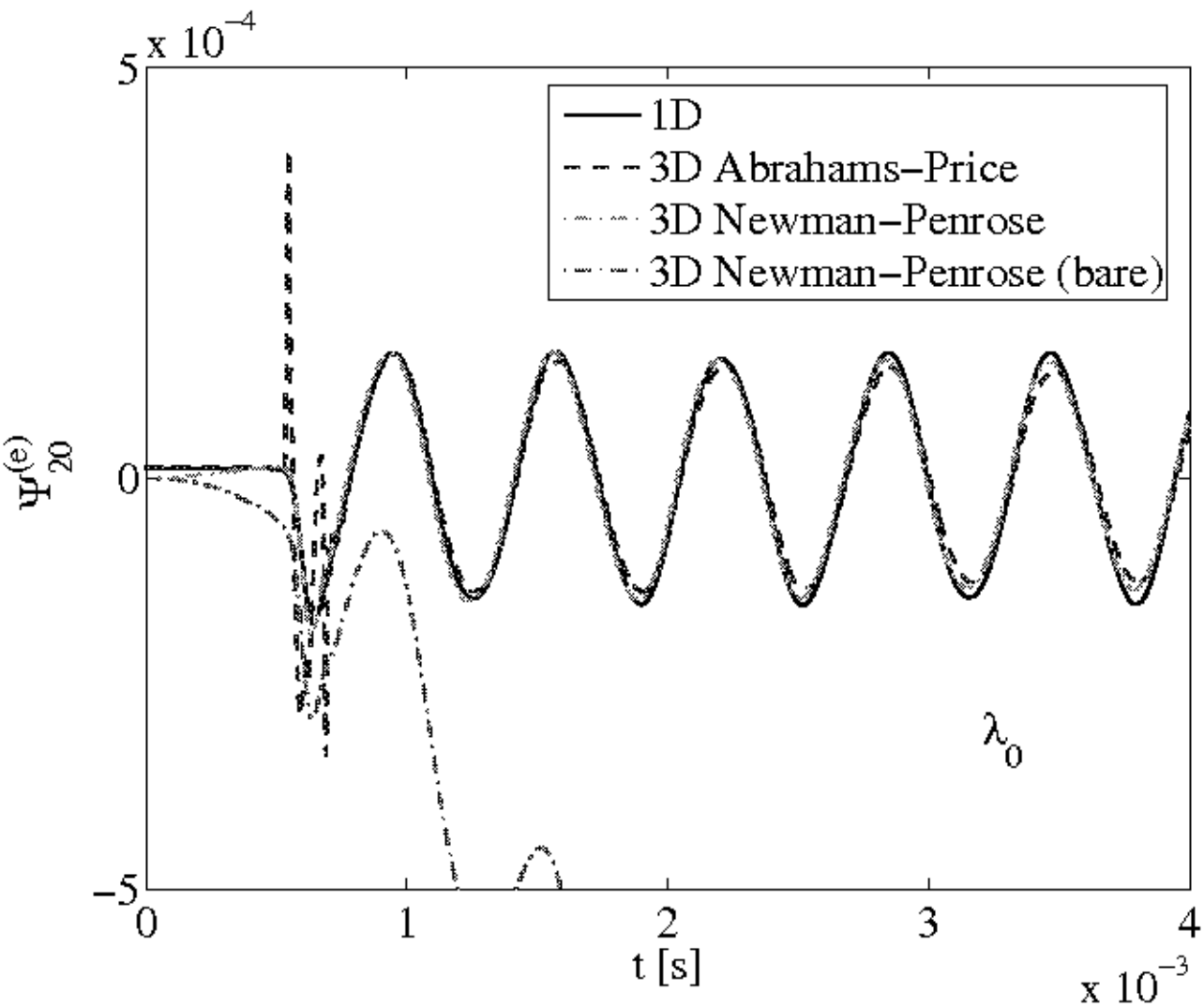
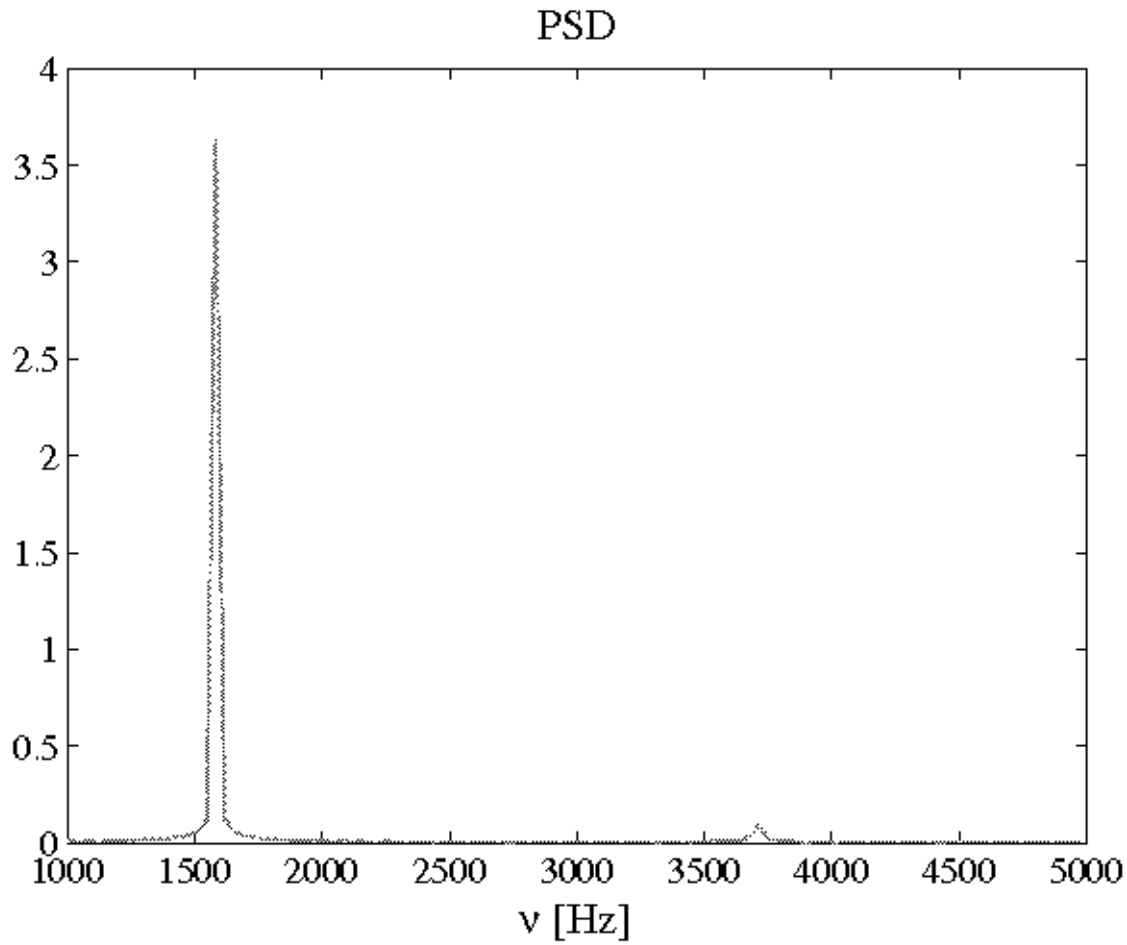
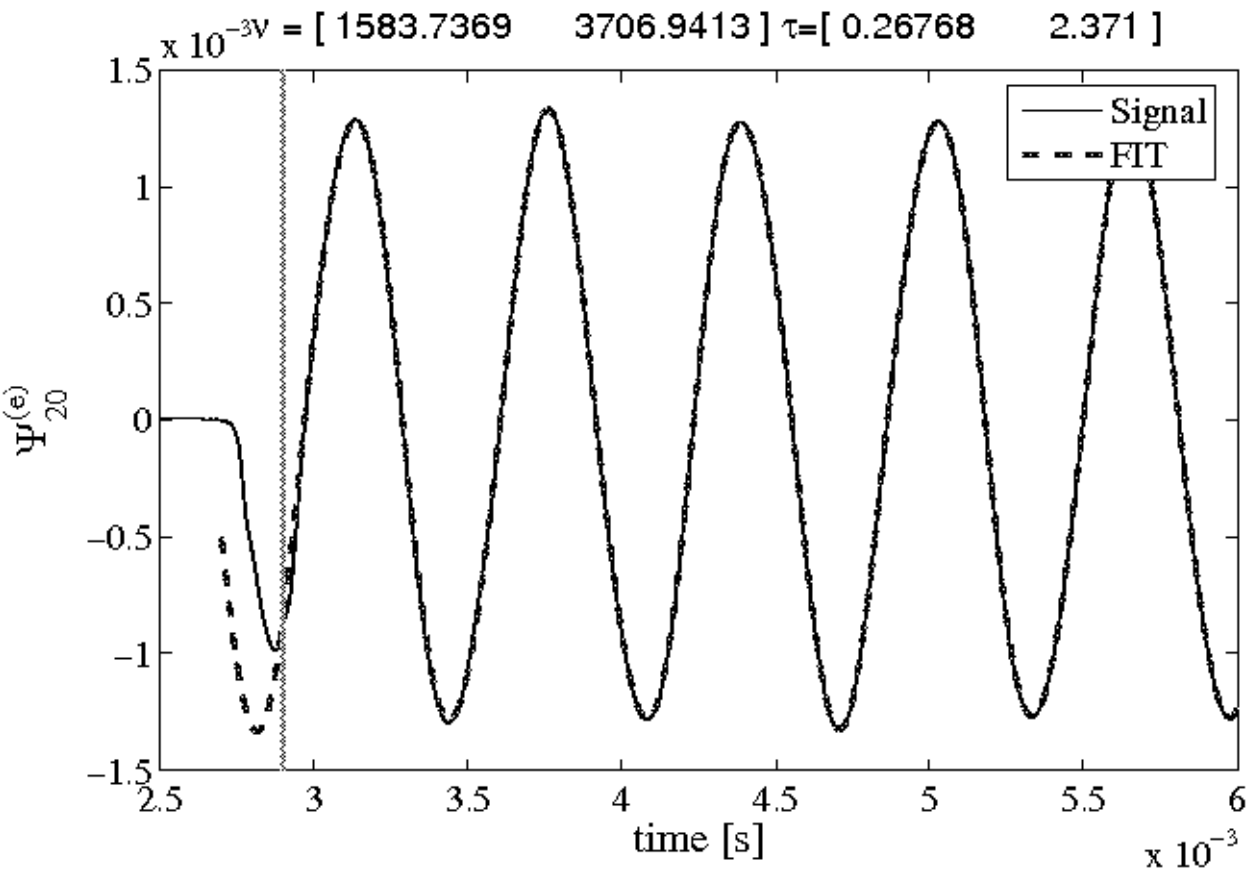
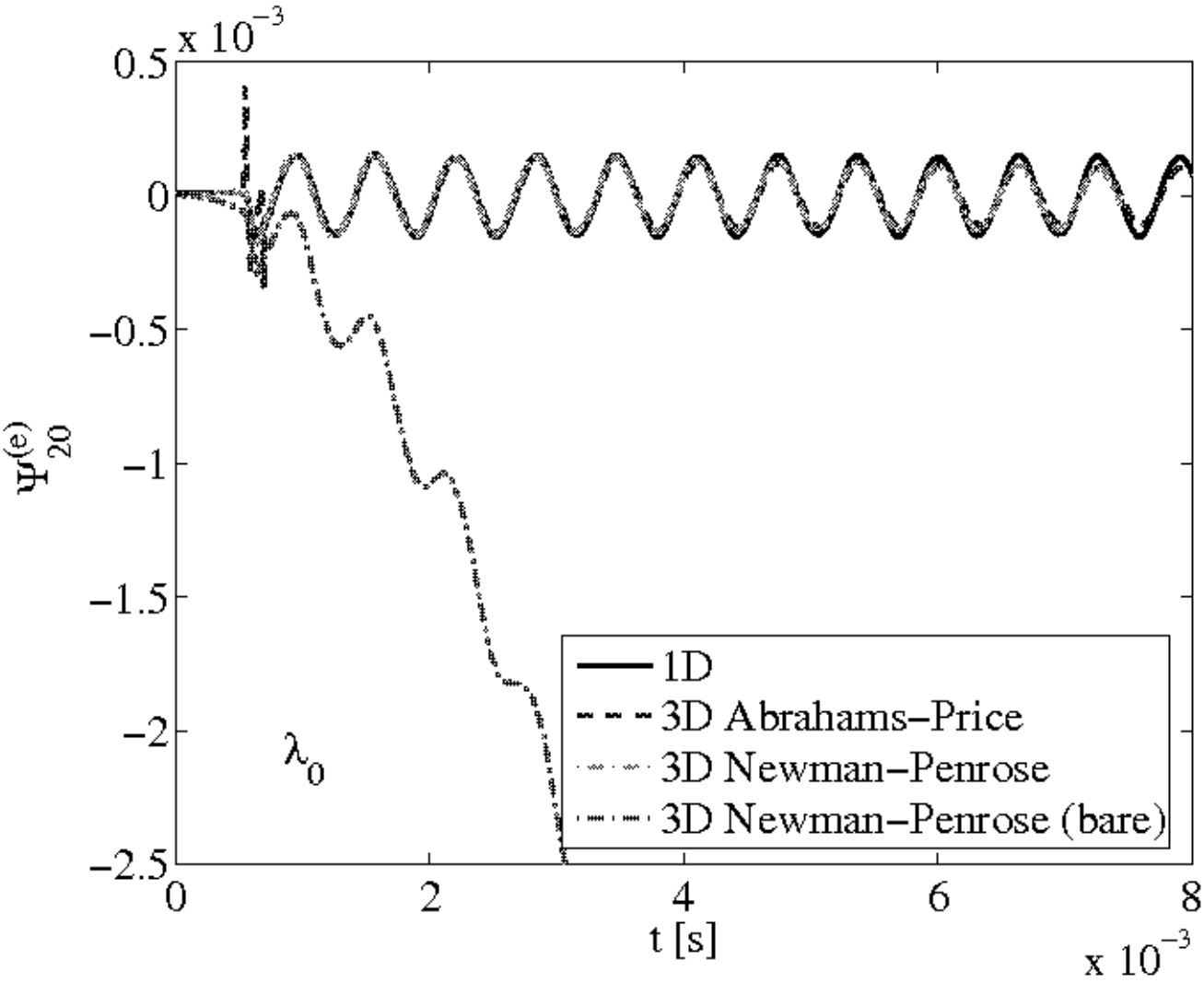
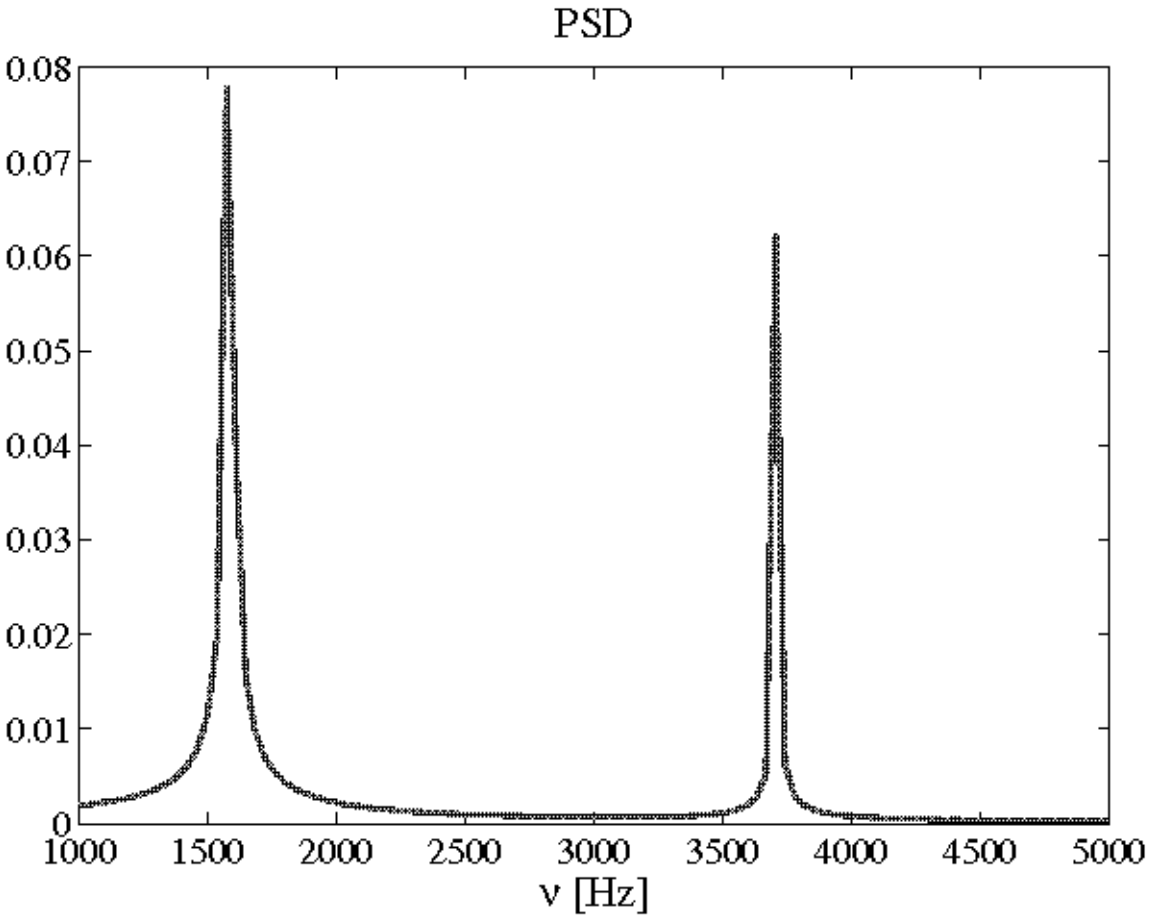
[gr-qc] 16 Feb 2009 fig

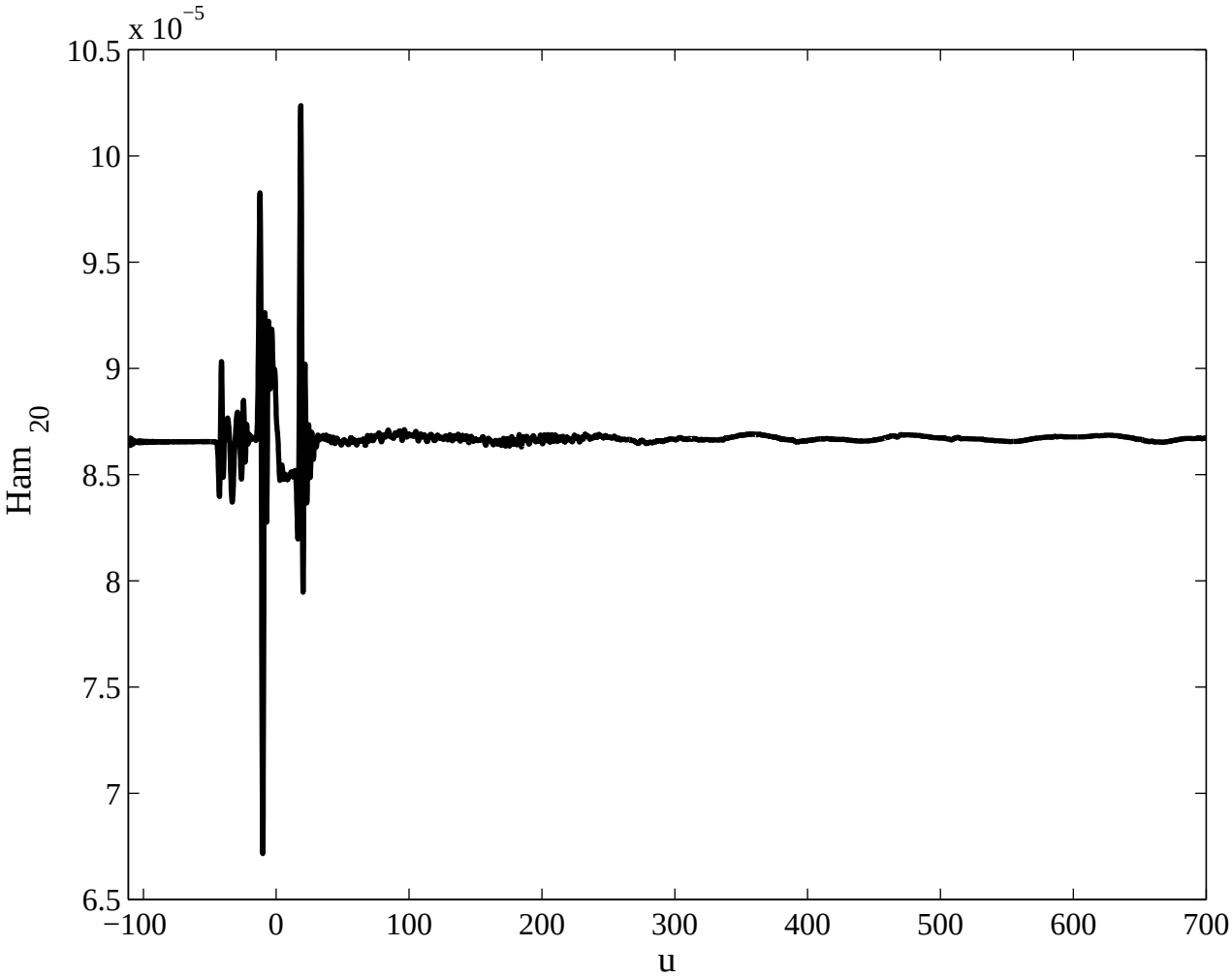


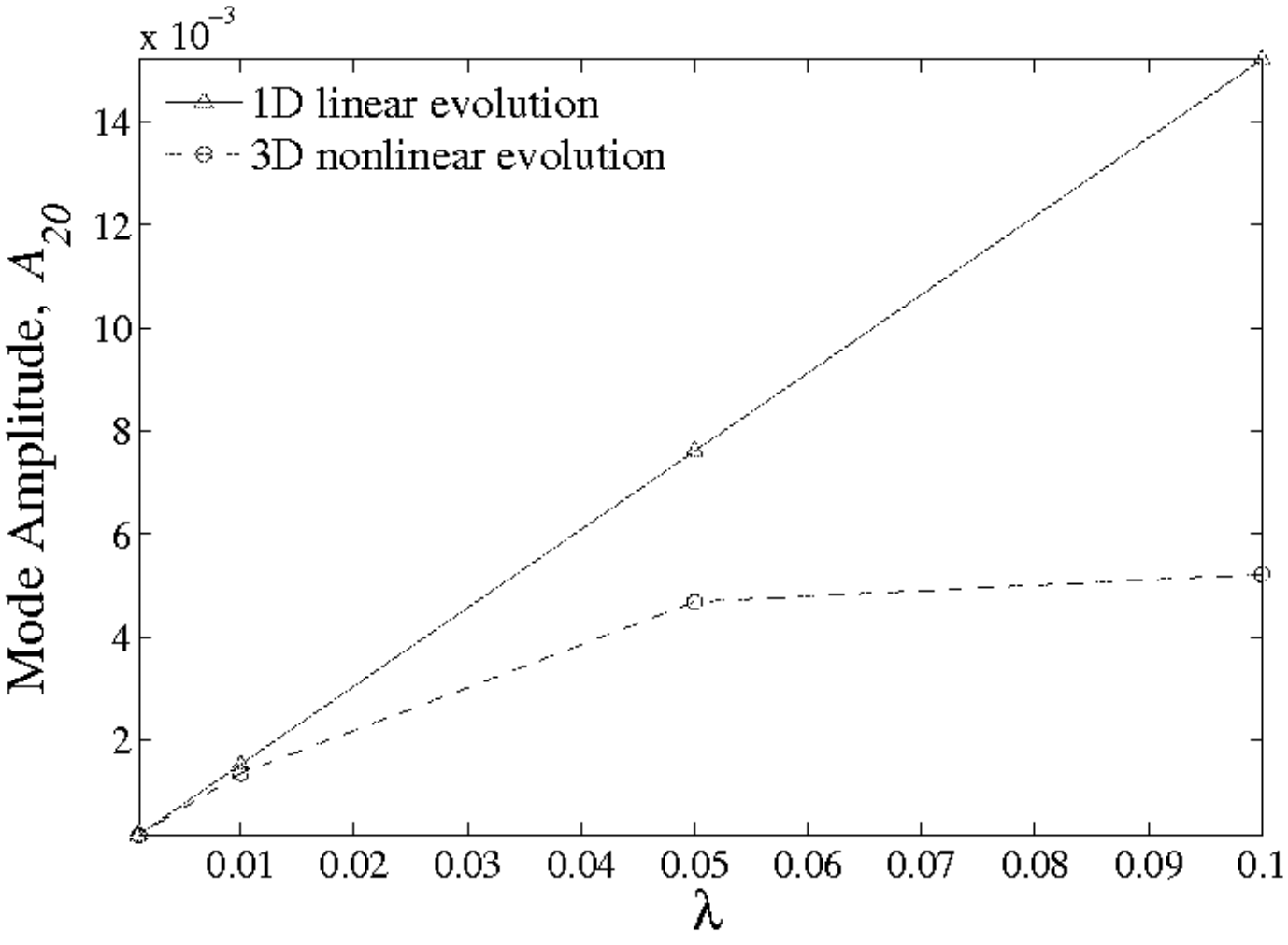

PSD
4
3.5
3
2.5
2
1.5
1
0.5
0
1000
1500
2000
2500
3000
3500
4000
4500
5000
ν [Hz]

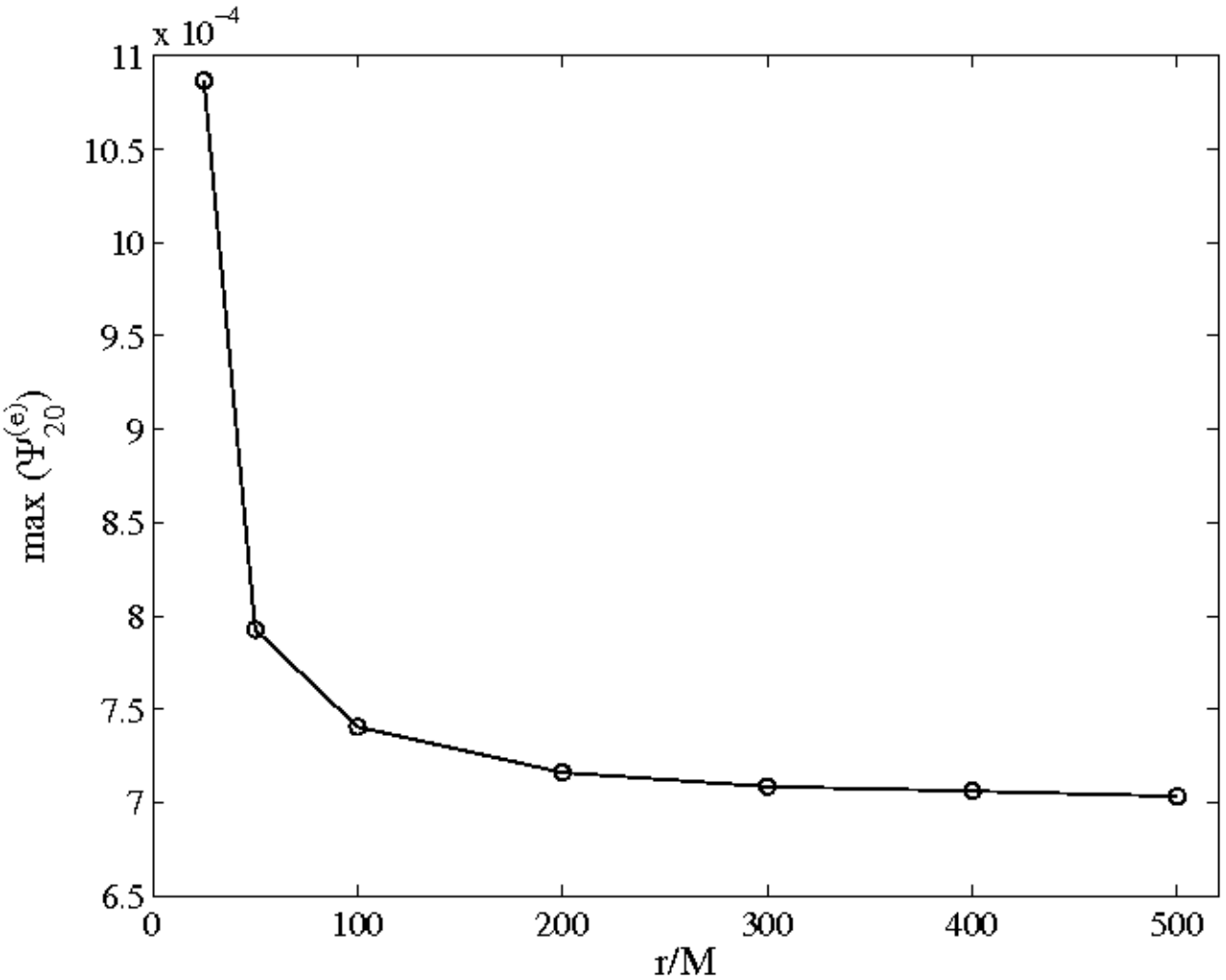

x 10^-3ν = [1583.7369 3706.9413] τ=[0.26768 2.371]
Signal
FIT
time [s]
x 10^-3

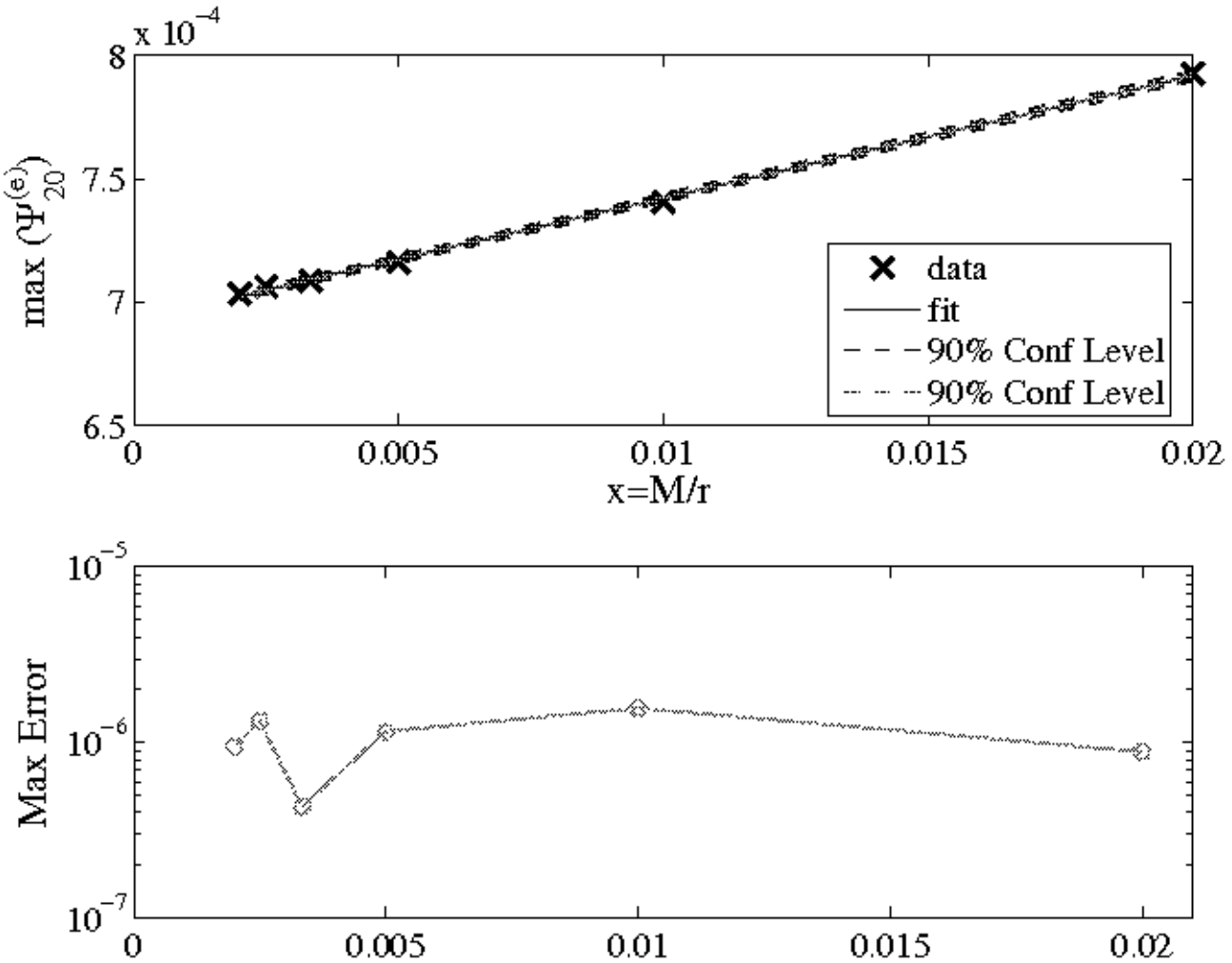

x 10^-3
0.5
0
−0.5
−1
−1.5
−2
−2.5
Ψ(e) 20
λ0
0
2
4
6
8
t [s]
x 10^-3
1D
3D Abrahams−Price
3D Newman−Penrose
3D Newman−Penrose (bare)

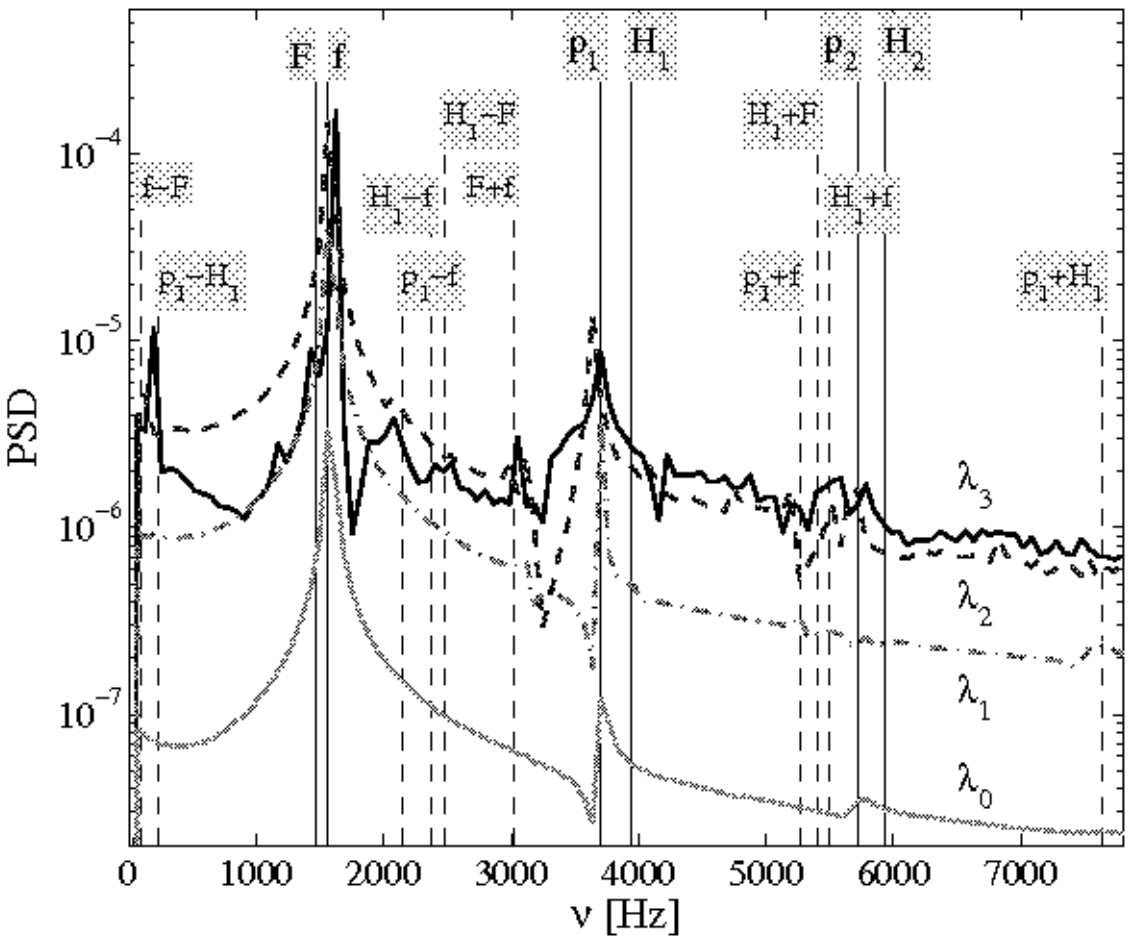

PSD
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
1000
1500
2000
2500
3000
3500
4000
4500
5000
ν [Hz]

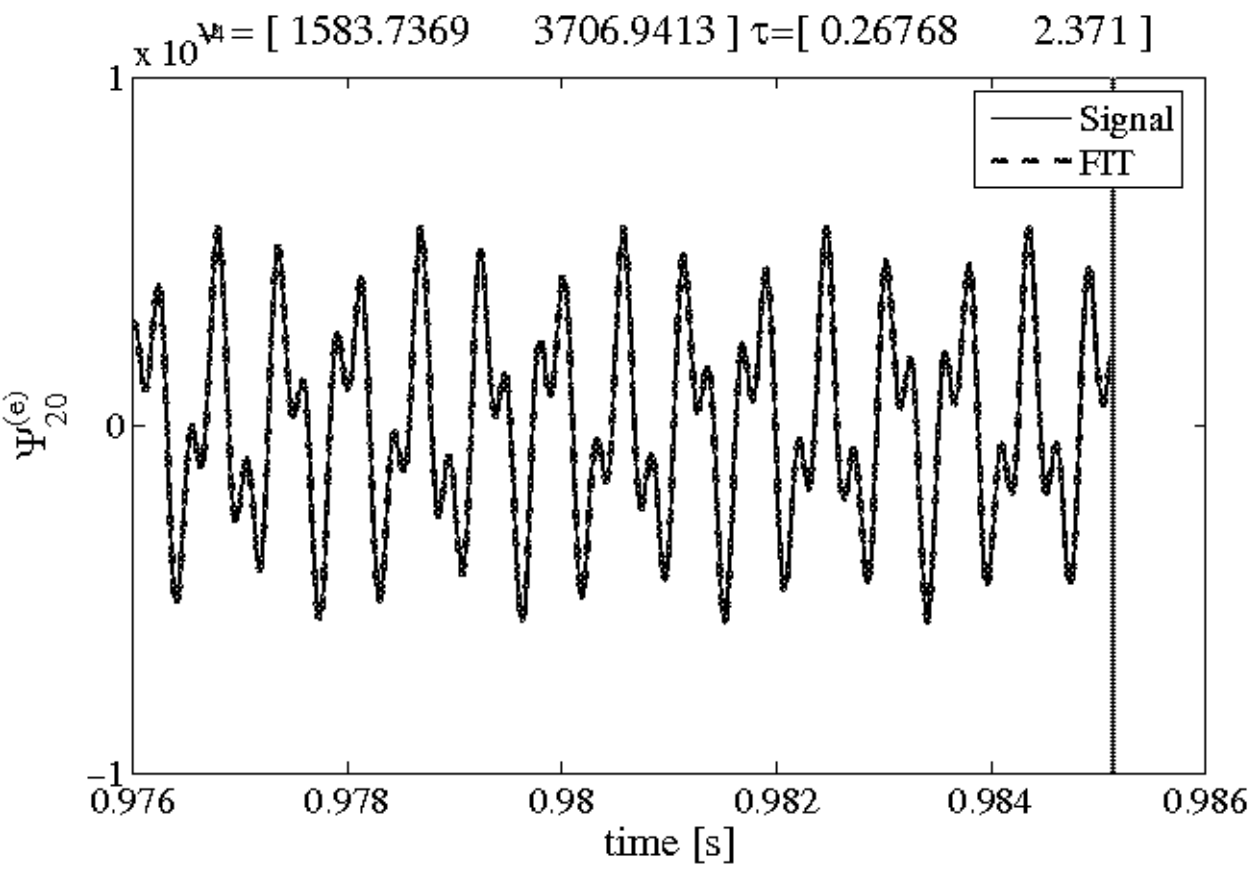

x 10^−5
10.5
10
9.5
9
8.5
8
7.5
7
6.5
Ham 20
−100
0
100
200
300
400
500
600
700
u

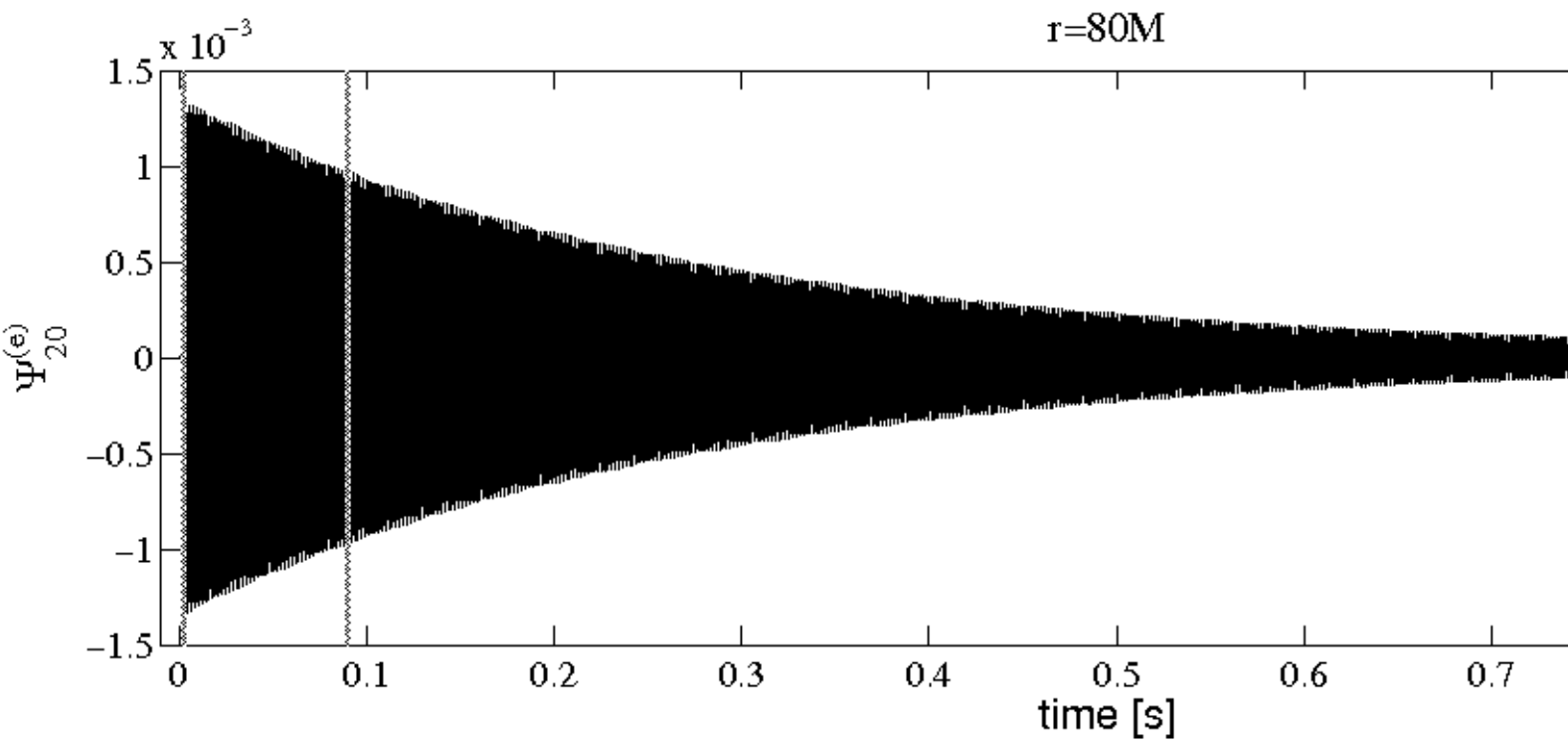

x 10^-3
1D linear evolution
3D nonlinear evolution
Mode Amplitude, A20
14
12
10
8
6
4
2
0.01
0.02
0.03
0.04
0.05
0.06
0.07
0.08
0.09
0.1
λ


x 10^-4
11
10.5
10
9.5
9
8.5
8
7.5
7
6.5
max (Ψ20(e))
0
100
200
300
400
500
r/M


x 10^-4
8
7.5
7
6.5
max (Ψ20(e))
0
0.005
0.01
0.015
0.02
x=M/r
data
fit
90% Conf Level
90% Conf Level
10^-5
10^-6
10^-7
Max Error
0
0.005
0.01
0.015
0.02


F
f
p1
H1
p2
H2
H1−F
H1+F
f−F
F+f
H1−f
H1+f
p1−H1
p1−f
p1+f
p1+H1
λ3
λ2
λ1
λ0
PSD
10−4
10−5
10−6
10−7
0
1000
2000
3000
4000
5000
6000
7000
ν [Hz]


ν = [1583.7369 3706.9413] τ=[0.26768 2.371]
x 10^4
1
0
−1
0.976
0.978
0.98
0.982
0.984
0.986
time [s]
Signal
FIT


r=80M
x 10^-3
1.5
1
0.5
0
−0.5
−1
−1.5
Ψ(e) 20
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
time [s]