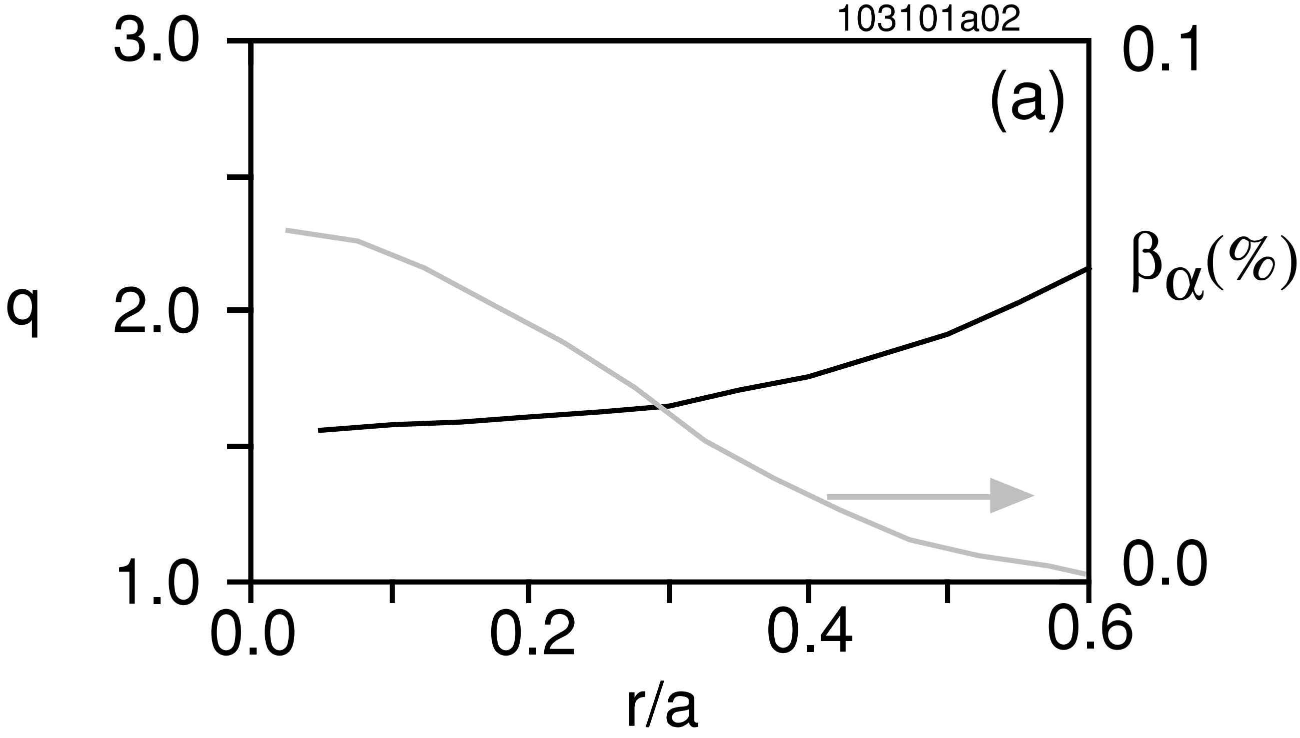
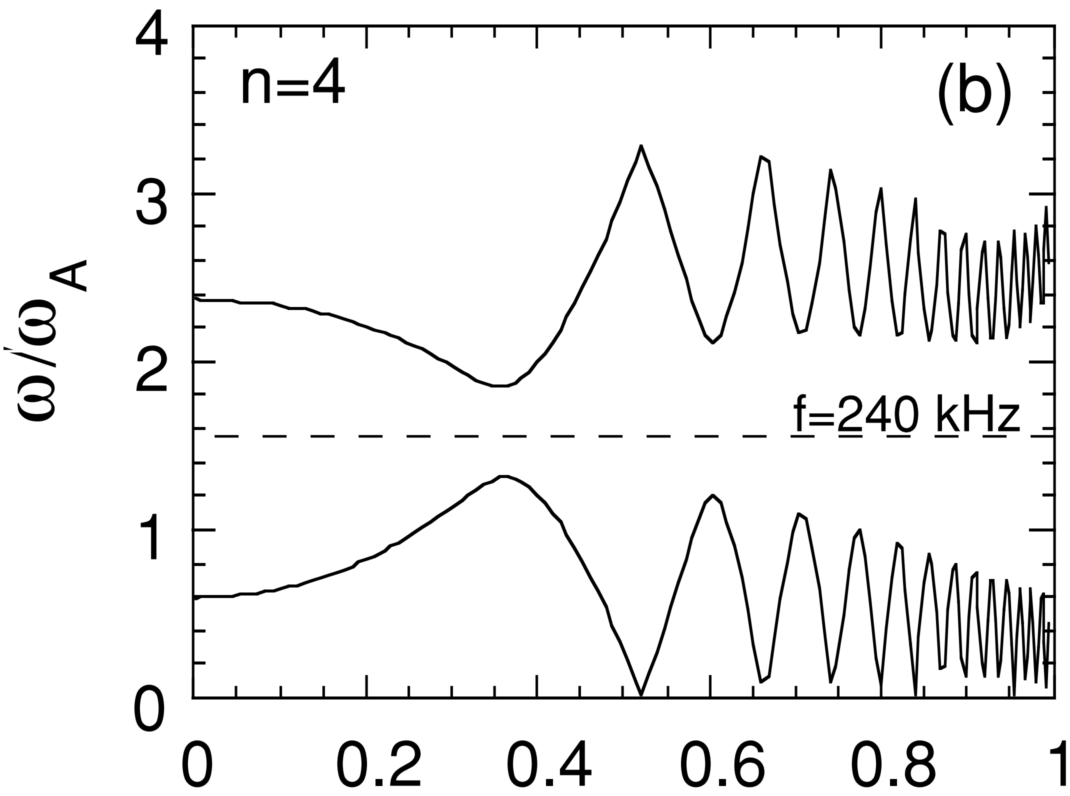
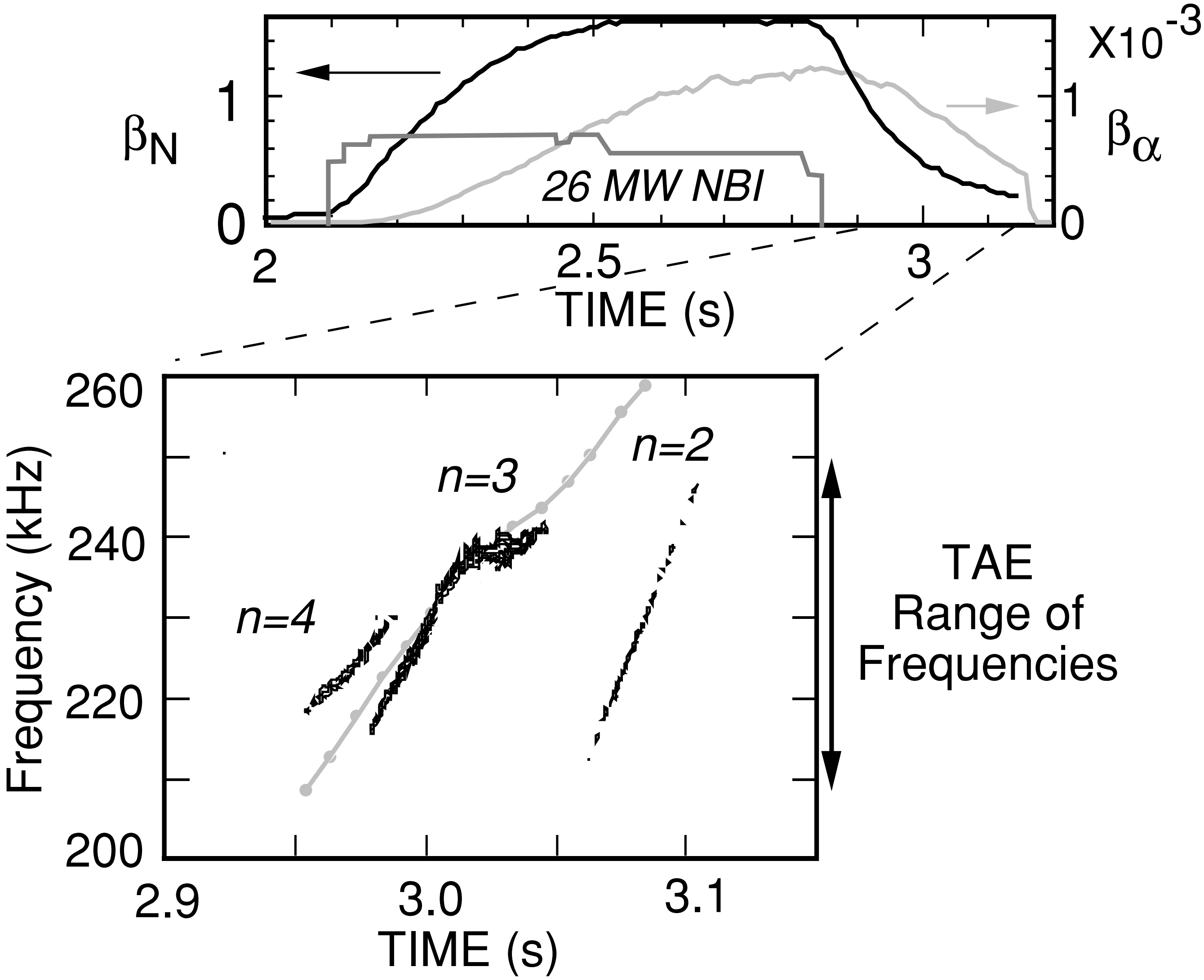


103101a02
3.0
2.0
1.0
q
0.1
0.0
(a)
$\beta_\alpha(\%)$
0.0
0.2
0.4
0.6
r/a



4
3
2
1
0
n=4
(b)
ω/ω_A
f=240 kHz
0
0.2
0.4
0.6
0.8
1
r/a

Fig. 34



X10
-3
1
0
β
N
β
α
26 MW NBI
2
2.5
3
TIME (s)
260
240
220
200
Frequency (kHz)
n=4
n=3
n=2
TAE
Range of
Frequencies
2.9
3.0
3.1
TIME (s)

Fig. 35

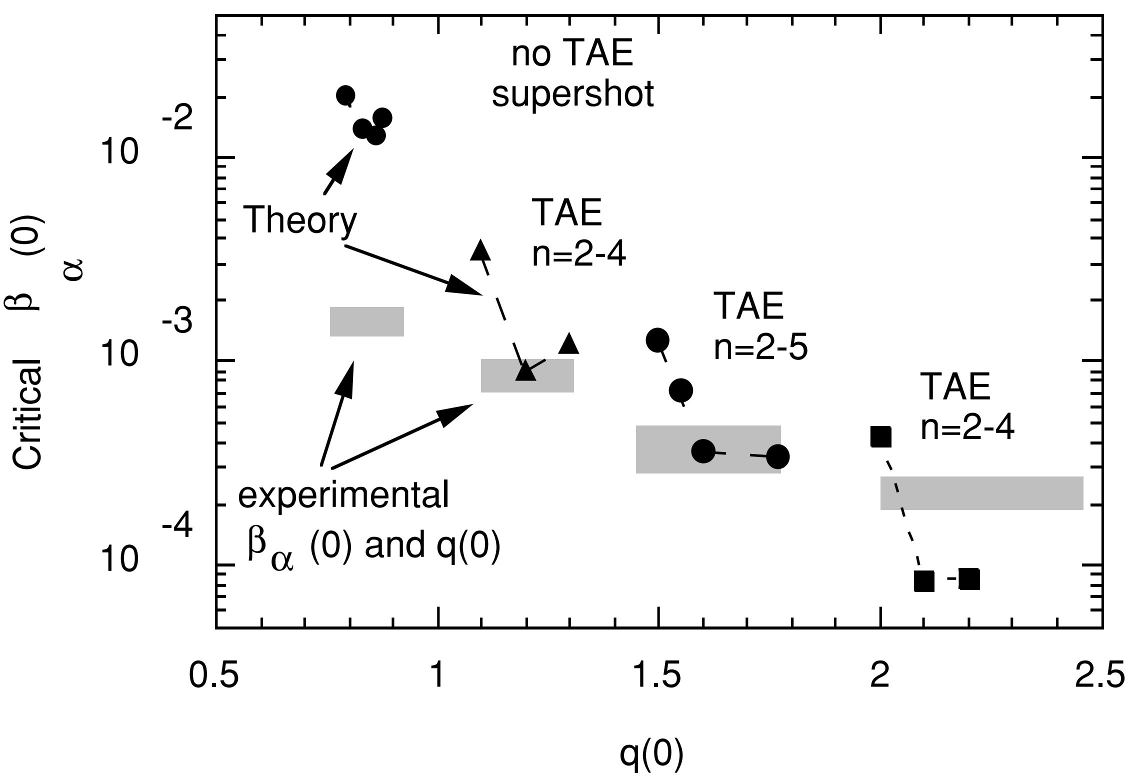
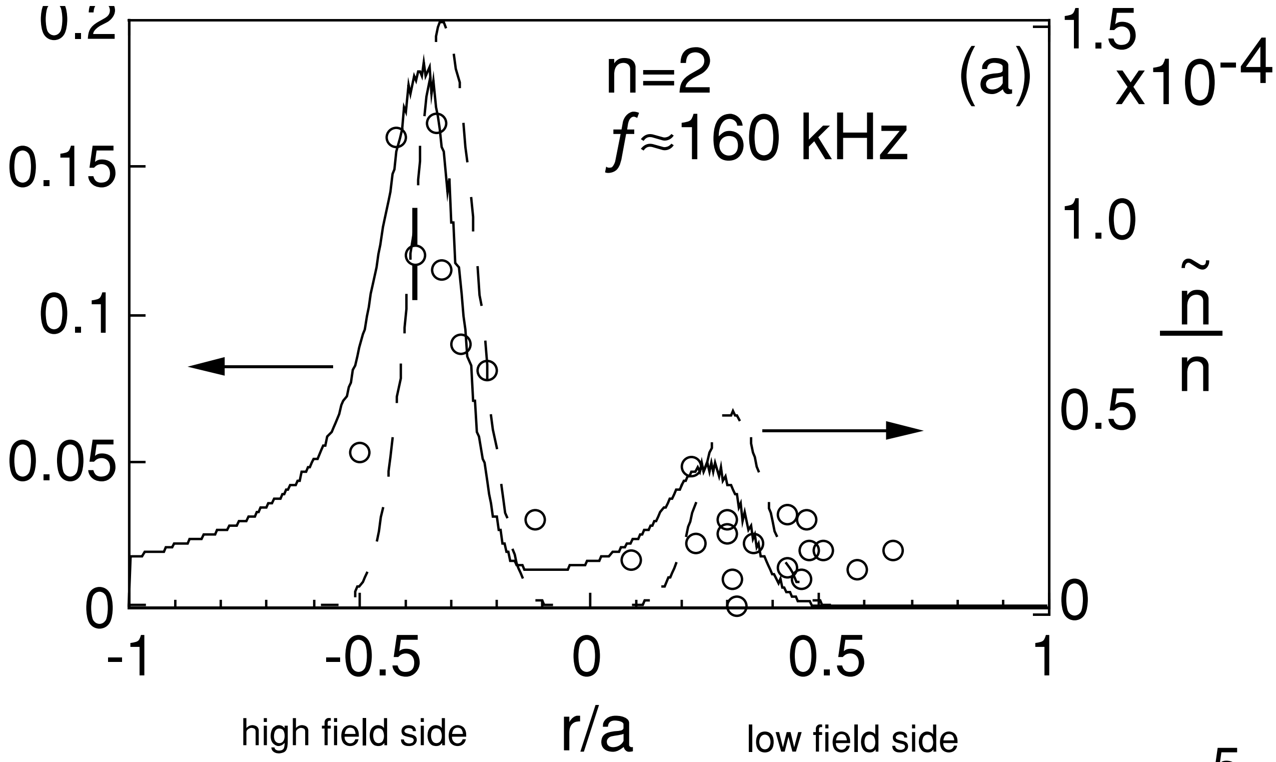
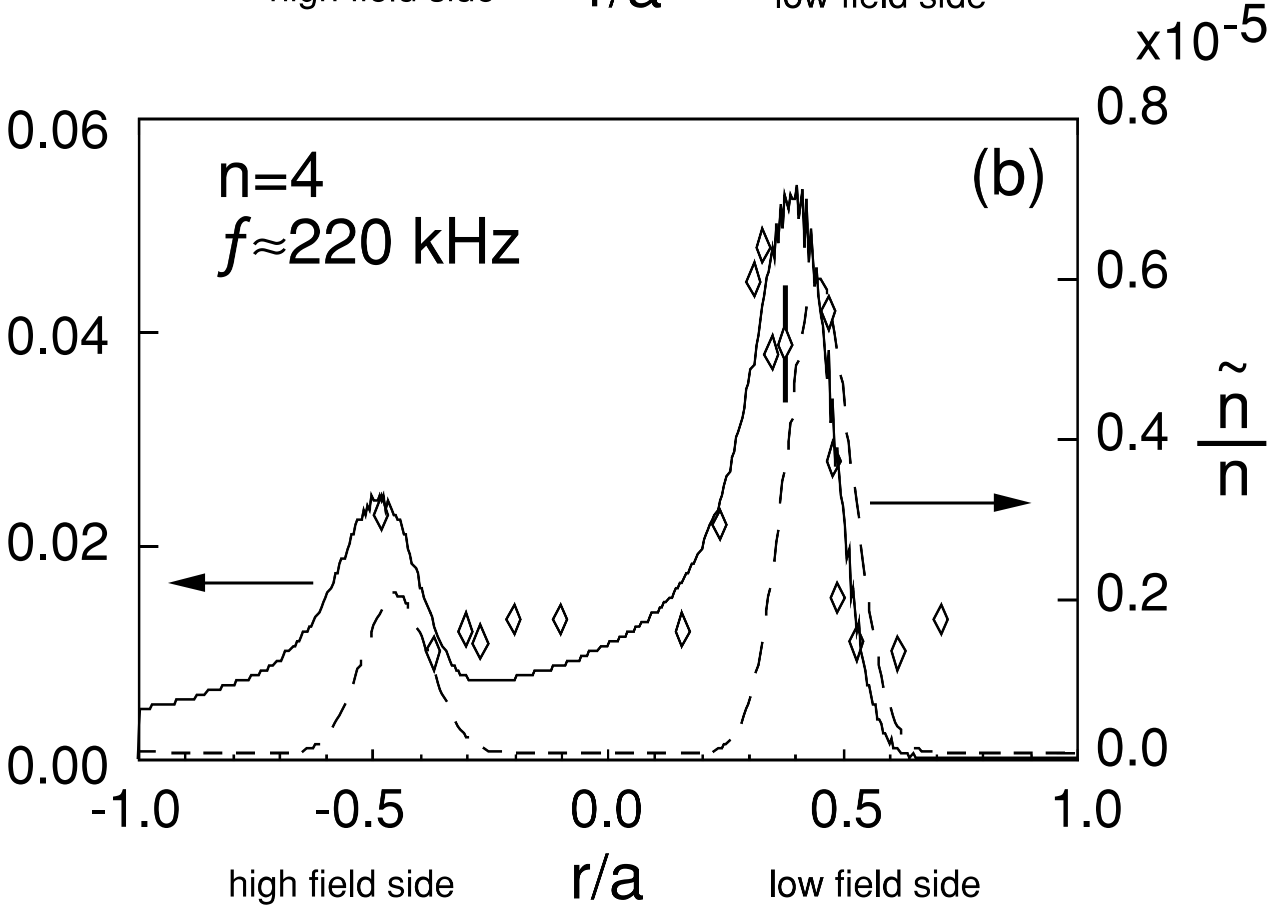

no TAE
supershot
Theory
TAE
n=2-4
TAE
n=2-5
TAE
n=2-4
experimental
β_α (0) and q(0)
Critical β_α (0)
10^{-2}
10^{-3}
10^{-4}
0.5
1
1.5
2
2.5
q(0)

Fig. 36



n=2
f≈160 kHz
(a)
x10-4
0.2
0.15
0.1
0.05
0
1.5
1.0
0.5
0
-1
-0.5
0
0.5
1
high field side
r/a
low field side
$\frac{\tilde{n}}{n}$



n=4
f≈220 kHz
(b)
x10-5
0.06
0.04
0.02
0.00
0.8
0.6
0.4
0.2
0.0
-1.0
-0.5
0.0
0.5
1.0
high field side
r/a
low field side
$\frac{\tilde{n}}{n}$

Fig. 37