A
Two 'Silicon Probes'
(16-32 contacts
on each)
Cortical
Activity
(ECoG)
Cortex
Striatum
Thal
GPe
SNr
D
R
C
V
B
250 ms epochs
STN
GPe-Ti
25th
75th
epochs
STN
spikes/epoch
C
channel -3
-2
-1
0
+1
+2
+3
10 ms
chan 0 - mean(chan -3 to +3)
Cortex-STN coherence
monopolar
± 3 channels
all channels
Coherence
Frequency (Hz)
D
dB
-5 -4 -3 -2
Frequency (Hz)
250 ms epochs
Time (s)
E
FoooF
Original Spectrum
Full Model Fit
Aperiodic Fit
Power (μV²)
exponent: 1.01
R²: 0.99
Frequency (Hz)
F
PSD 'high STN spiking'
PSD 'low STN spiking'
exponent 'high STN spiking': 0.51
exponent 'low STN spiking': 1.01
Power (μV²)
Frequency (Hz)