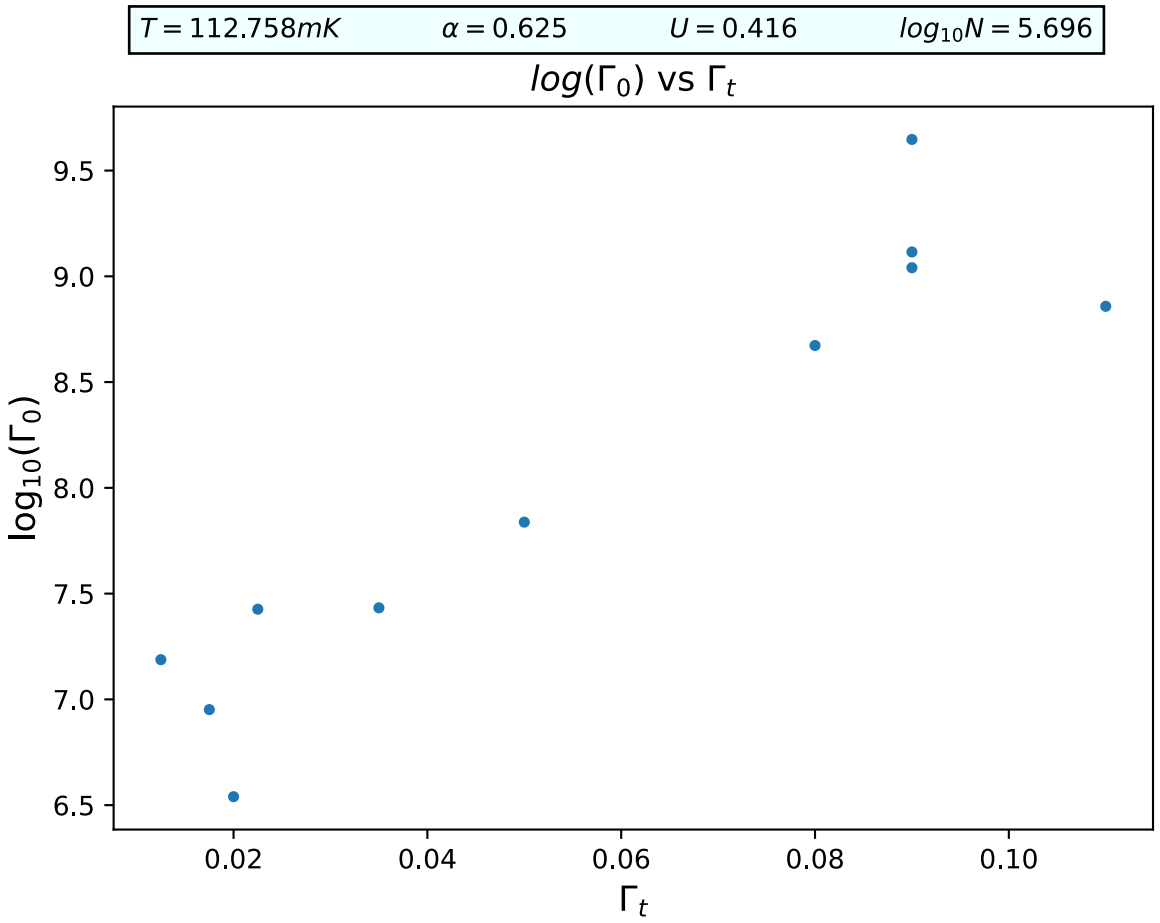
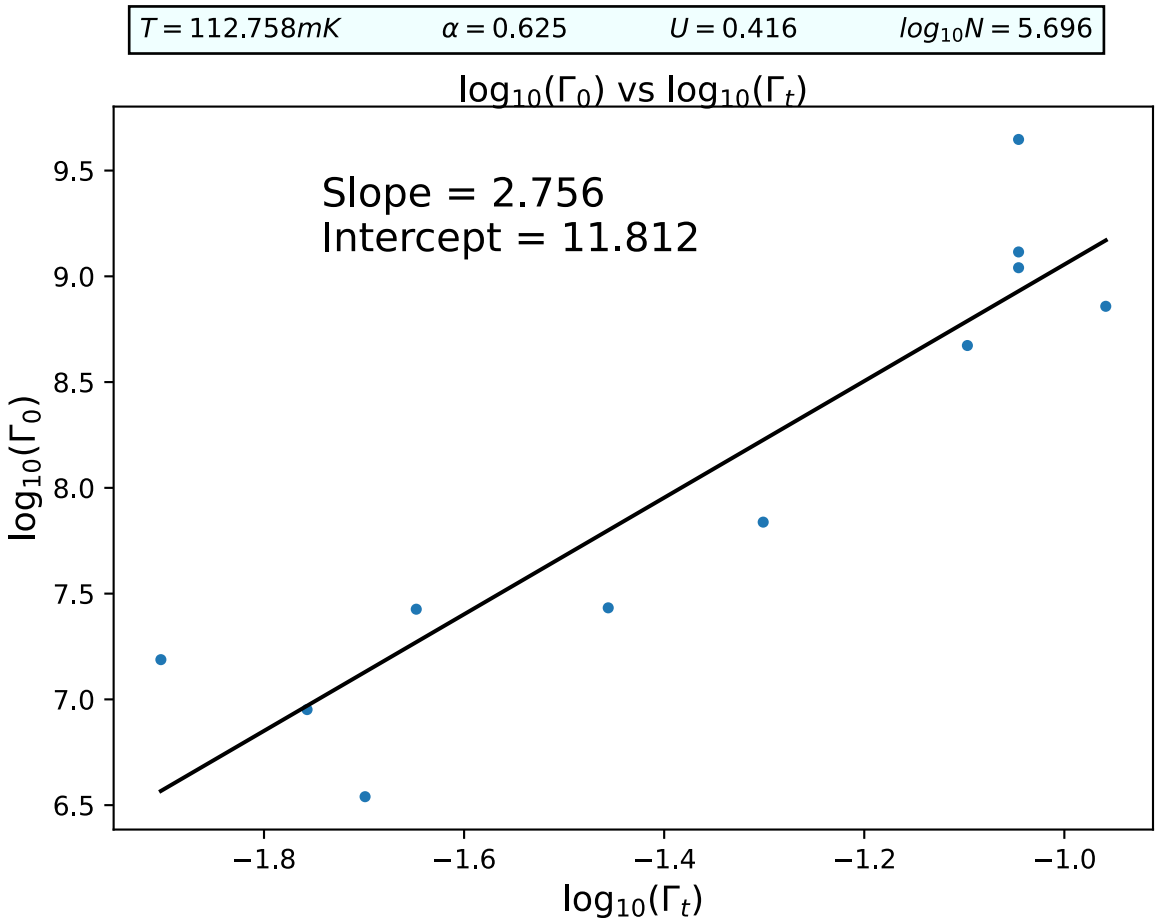
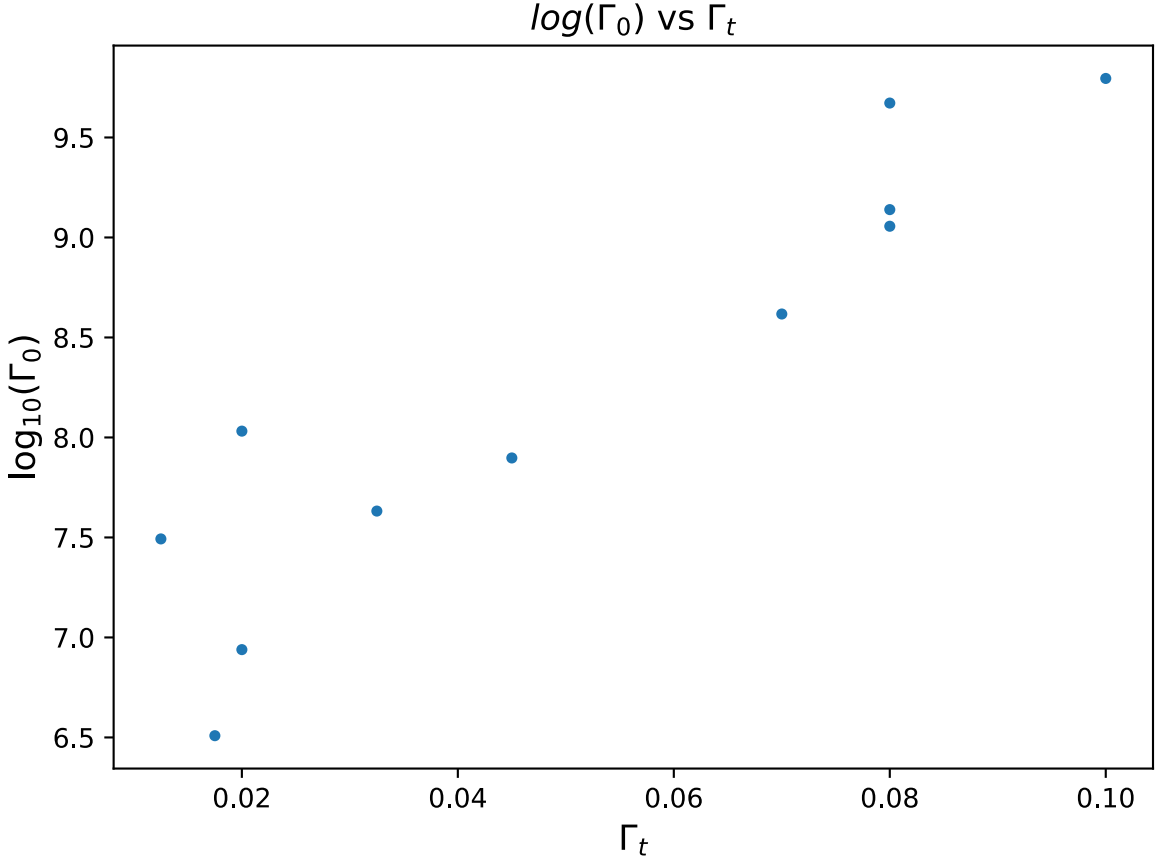
C:G = 1:1


$T = 112.758mK$ $\alpha = 0.625$ $U = 0.416$ $log_{10}N = 5.696$
$log(\Gamma_0)$ vs Γ_t
$\log_{10}(\Gamma_0)$
Γ_t
9.5
9.0
8.5
8.0
7.5
7.0
6.5
0.02
0.04
0.06
0.08
0.10

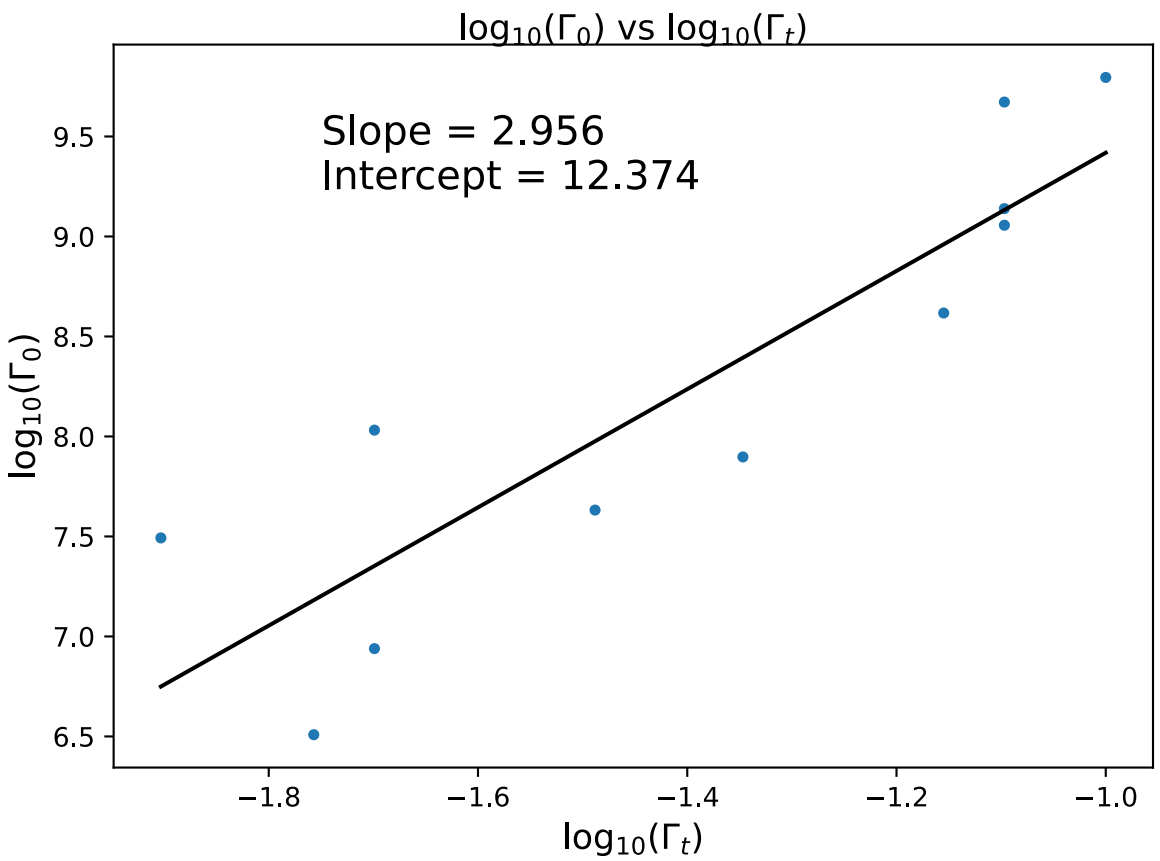

$T = 112.758mK$ $\alpha = 0.625$ $U = 0.416$ $log_{10}N = 5.696$
$\log_{10}(\Gamma_0)$ vs $\log_{10}(\Gamma_t)$
Slope = 2.756
Intercept = 11.812
$\log_{10}(\Gamma_0)$
$\log_{10}(\Gamma_t)$
9.5
9.0
8.5
8.0
7.5
7.0
6.5
−1.8
−1.6
−1.4
−1.2
−1.0

C:G = 2:1

$T = 109.813mK$	$\alpha = 0.615$	$U = 0.416$	$log_{10}N = 5.481$	$C:R = 2:1$

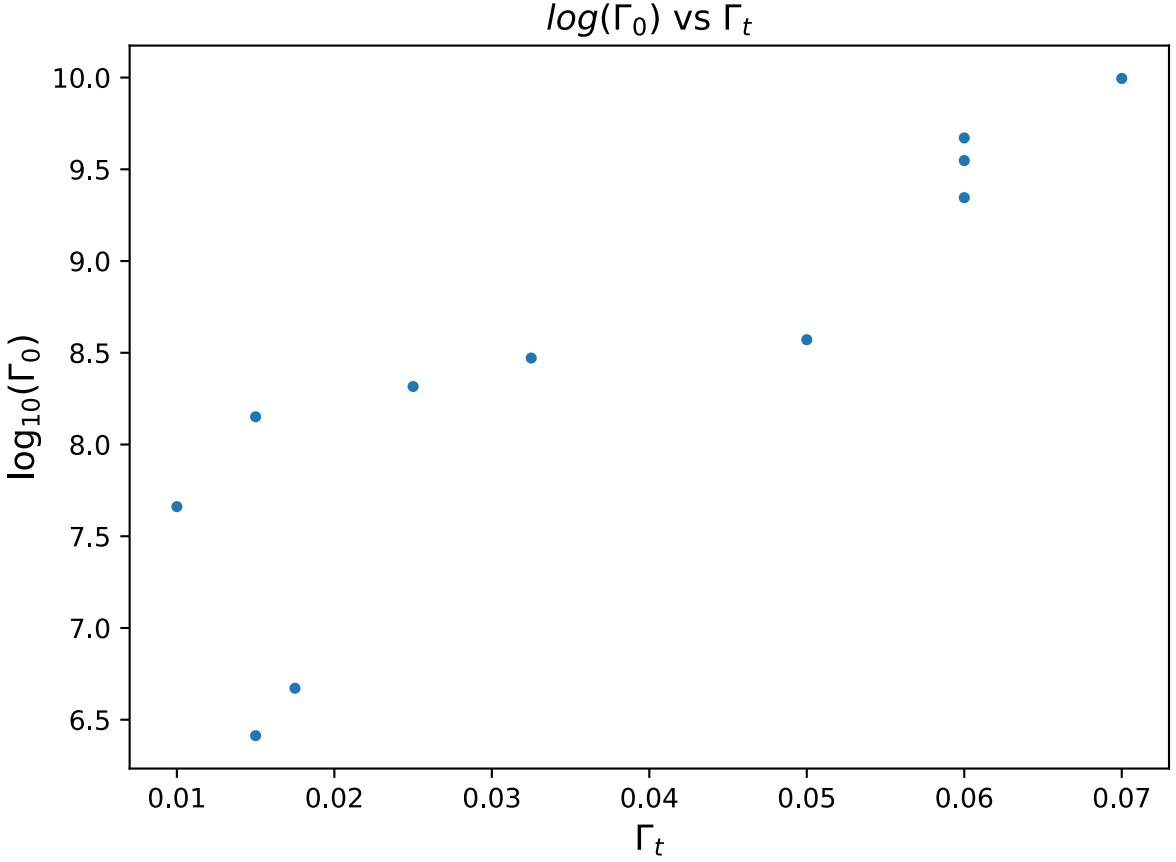


$T = 109.813mK$	$\alpha = 0.615$	$U = 0.416$	$log_{10}N = 5.481$	$C:R = 2:1$

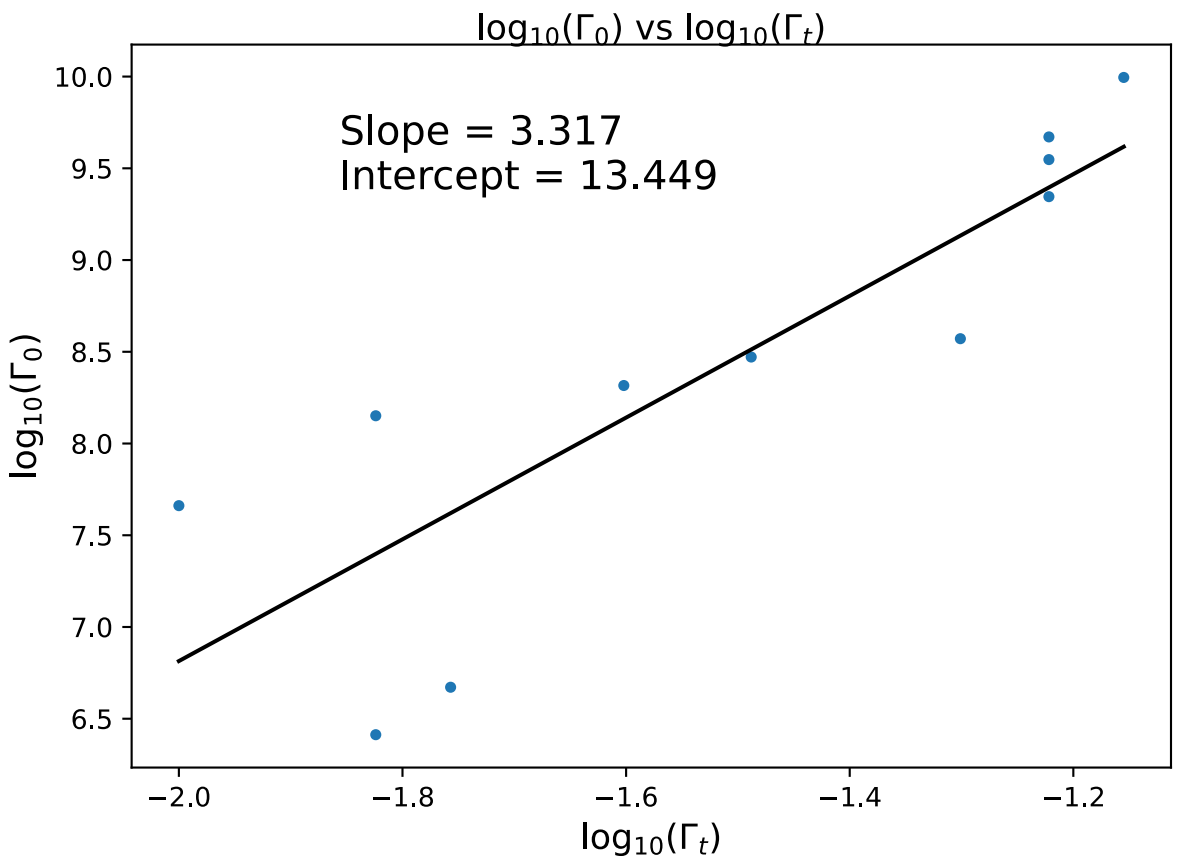


C:G = 10:1

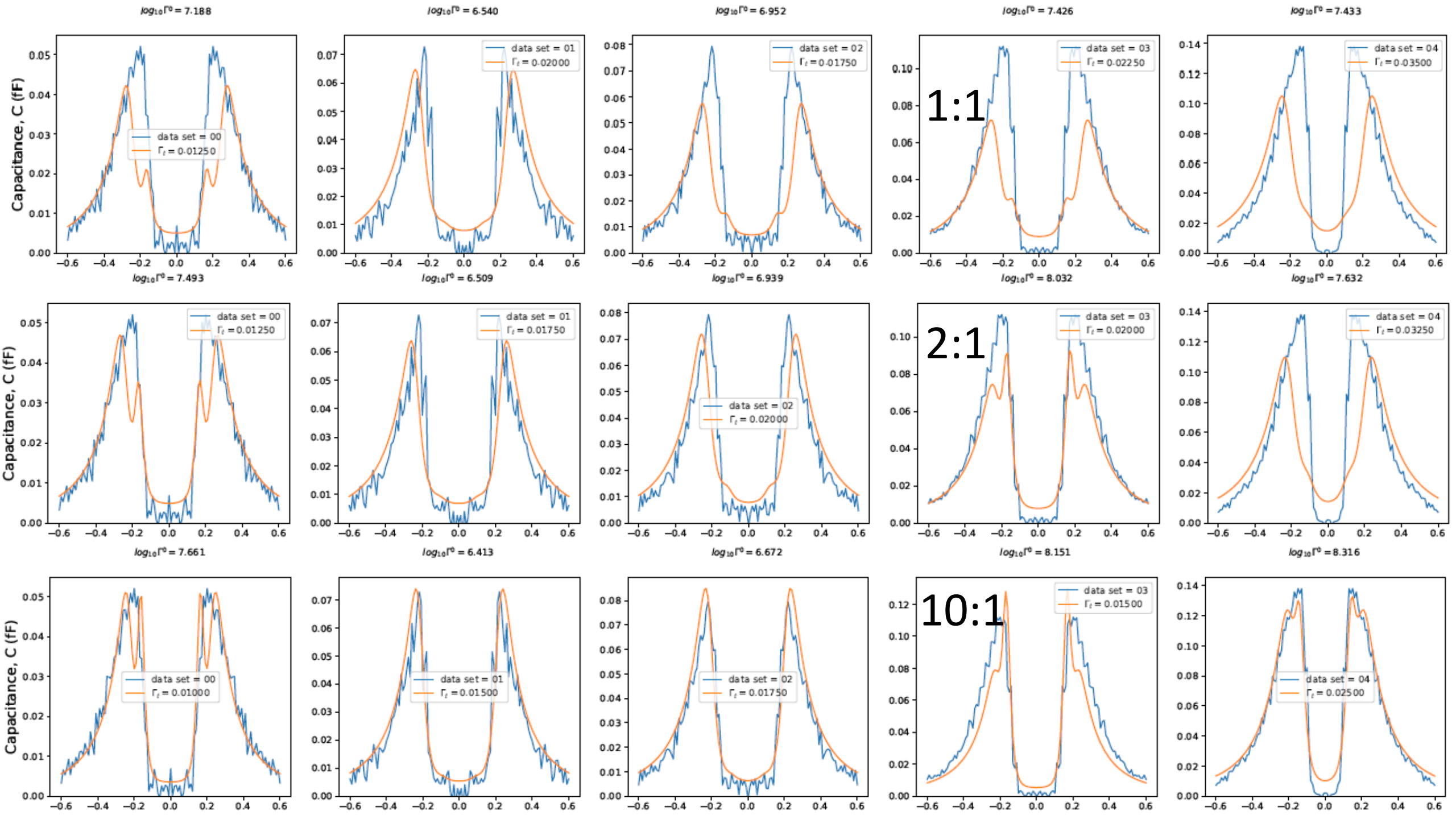
$T = 90.769mK$	$\alpha = 0.583$	$U = 0.416$	$log_{10}N = 5.556$	$C:R = 10:1$

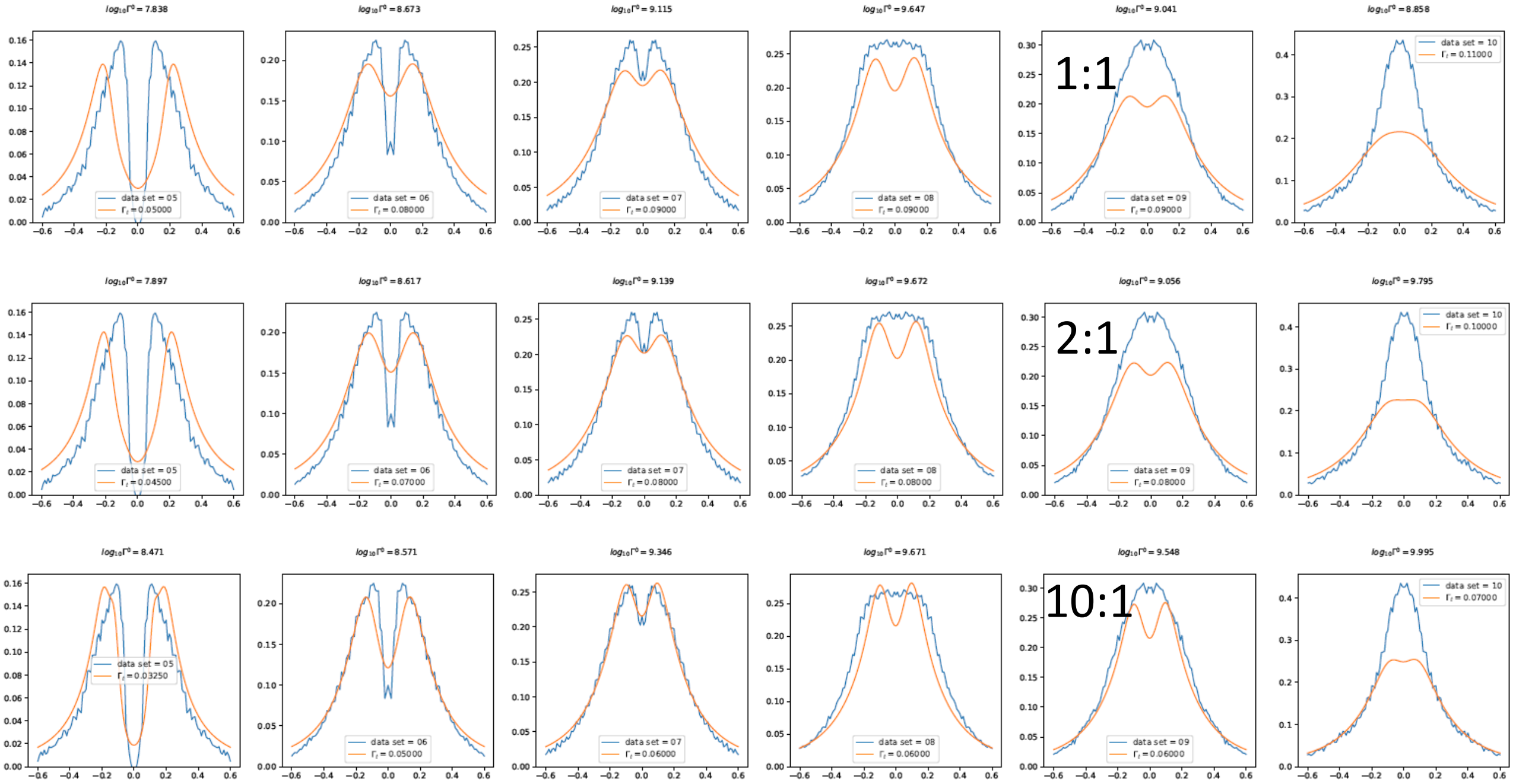


$T = 90.769mK$	$\alpha = 0.583$	$U = 0.416$	$log_{10}N = 5.556$	$C:R = 10:1$

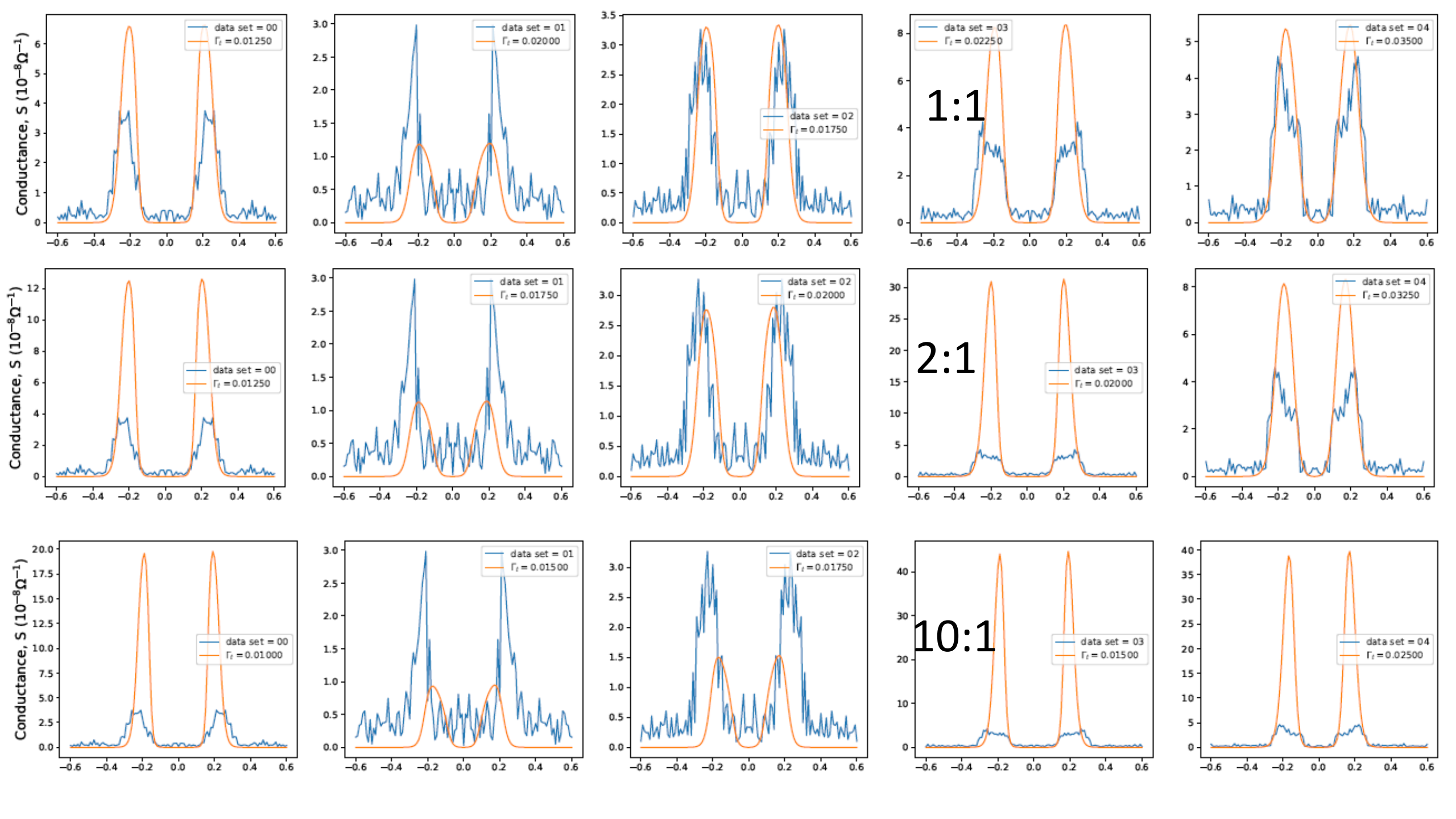


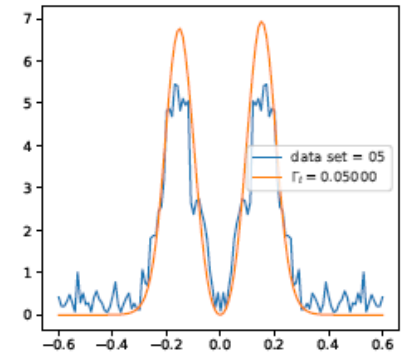
Capacitance

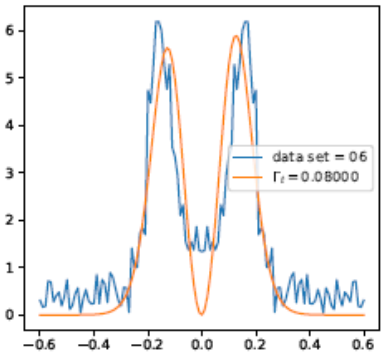

1:1
2:1
10:1
Capacitance, C (fF)
data set = 00
data set = 01
data set = 02
data set = 03
data set = 04
$\log_{10}\Gamma^0 = 7.188$
$\log_{10}\Gamma^0 = 6.540$
$\log_{10}\Gamma^0 = 6.952$
$\log_{10}\Gamma^0 = 7.426$
$\log_{10}\Gamma^0 = 7.433$
$\log_{10}\Gamma^0 = 7.493$
$\log_{10}\Gamma^0 = 6.509$
$\log_{10}\Gamma^0 = 6.939$
$\log_{10}\Gamma^0 = 8.032$
$\log_{10}\Gamma^0 = 7.632$
$\log_{10}\Gamma^0 = 7.661$
$\log_{10}\Gamma^0 = 6.413$
$\log_{10}\Gamma^0 = 6.672$
$\log_{10}\Gamma^0 = 8.151$
$\log_{10}\Gamma^0 = 8.316$

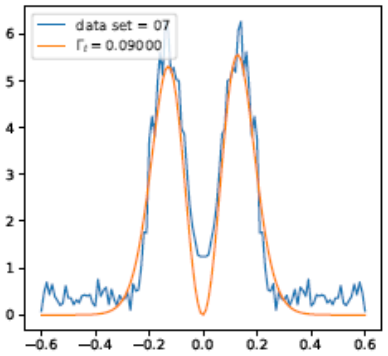

$log_{10}\Gamma^0 = 7.838$
data set = 05
$\Gamma_i = 0.05000$
$log_{10}\Gamma^0 = 8.673$
data set = 06
$\Gamma_i = 0.08000$
$log_{10}\Gamma^0 = 9.115$
data set = 07
$\Gamma_i = 0.09000$
$log_{10}\Gamma^0 = 9.647$
data set = 08
$\Gamma_i = 0.09000$
$log_{10}\Gamma^0 = 9.041$
1:1
data set = 09
$\Gamma_i = 0.09000$
$log_{10}\Gamma^0 = 8.858$
data set = 10
$\Gamma_i = 0.11000$
$log_{10}\Gamma^0 = 7.897$
data set = 05
$\Gamma_i = 0.04500$
$log_{10}\Gamma^0 = 8.617$
data set = 06
$\Gamma_i = 0.07000$
$log_{10}\Gamma^0 = 9.139$
data set = 07
$\Gamma_i = 0.08000$
$log_{10}\Gamma^0 = 9.672$
data set = 08
$\Gamma_i = 0.08000$
$log_{10}\Gamma^0 = 9.056$
2:1
data set = 09
$\Gamma_i = 0.08000$
$log_{10}\Gamma^0 = 9.795$
data set = 10
$\Gamma_i = 0.10000$
$log_{10}\Gamma^0 = 8.471$
data set = 05
$\Gamma_i = 0.03250$
$log_{10}\Gamma^0 = 8.571$
data set = 06
$\Gamma_i = 0.05000$
$log_{10}\Gamma^0 = 9.346$
data set = 07
$\Gamma_i = 0.06000$
$log_{10}\Gamma^0 = 9.671$
data set = 08
$\Gamma_i = 0.06000$
$log_{10}\Gamma^0 = 9.548$
10:1
data set = 09
$\Gamma_i = 0.06000$
$log_{10}\Gamma^0 = 9.995$
data set = 10
$\Gamma_i = 0.07000$

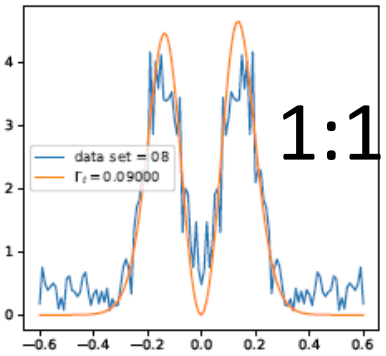
Conductance


Conductance, S ($10^{-8}\Omega^{-1}$)
data set = 00
$\Gamma_\ell = 0.01250$
data set = 01
$\Gamma_\ell = 0.02000$
data set = 02
$\Gamma_\ell = 0.01750$
data set = 03
$\Gamma_\ell = 0.02250$
1:1
data set = 04
$\Gamma_\ell = 0.03500$
Conductance, S ($10^{-8}\Omega^{-1}$)
data set = 00
$\Gamma_\ell = 0.01250$
data set = 01
$\Gamma_\ell = 0.01750$
data set = 02
$\Gamma_\ell = 0.02000$
2:1
data set = 03
$\Gamma_\ell = 0.02000$
data set = 04
$\Gamma_\ell = 0.03250$
Conductance, S ($10^{-8}\Omega^{-1}$)
data set = 00
$\Gamma_\ell = 0.01000$
data set = 01
$\Gamma_\ell = 0.01500$
data set = 02
$\Gamma_\ell = 0.01750$
10:1
data set = 03
$\Gamma_\ell = 0.01500$
data set = 04
$\Gamma_\ell = 0.02500$

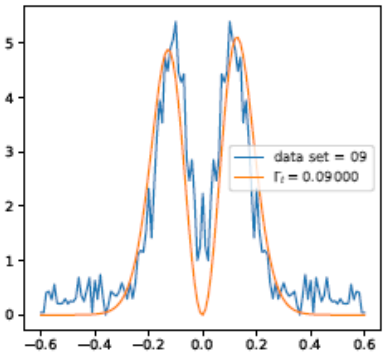

data set = 05
$\Gamma_\ell = 0.05000$

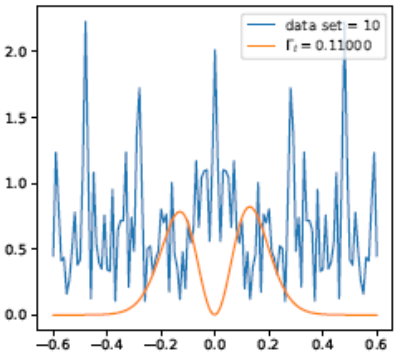

data set = 06
$\Gamma_\ell = 0.08000$

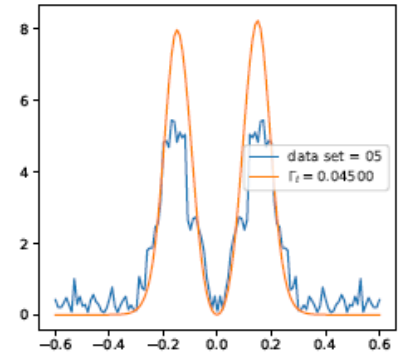

data set = 07
$\Gamma_\ell = 0.09000$

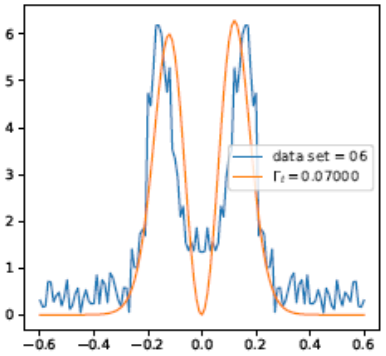

data set = 08
$\Gamma_\ell = 0.09000$

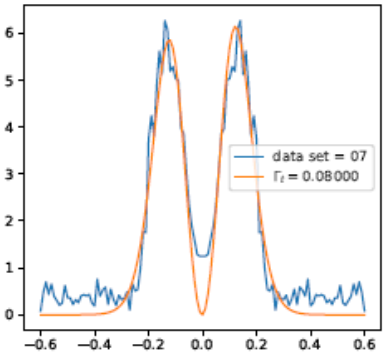
1:1

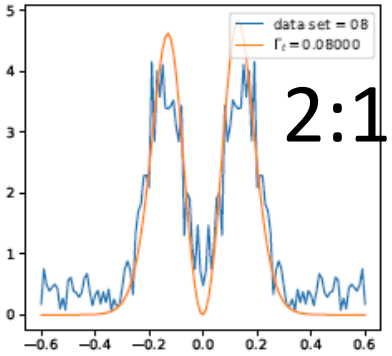

data set = 09
$\Gamma_\ell = 0.09000$


data set = 10
$\Gamma_\ell = 0.11000$

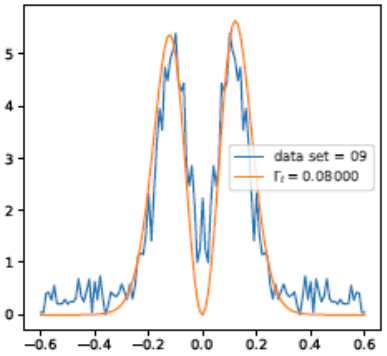

data set = 05
$\Gamma_\ell = 0.04500$

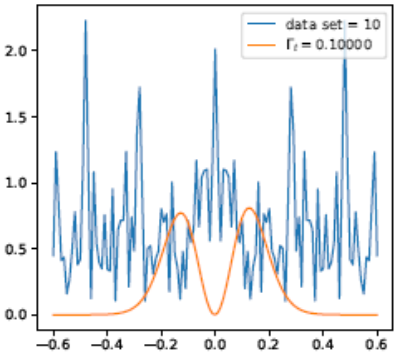

data set = 06
$\Gamma_\ell = 0.07000$

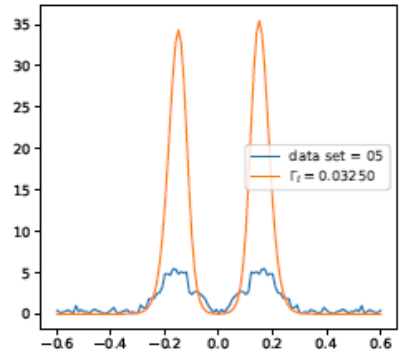

data set = 07
$\Gamma_\ell = 0.08000$

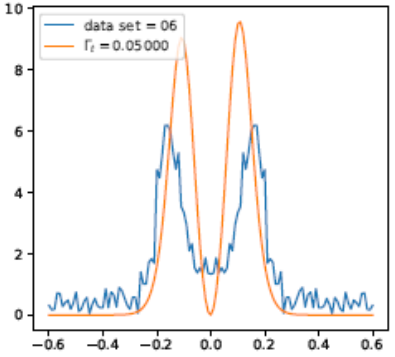

data set = 08
$\Gamma_\ell = 0.08000$

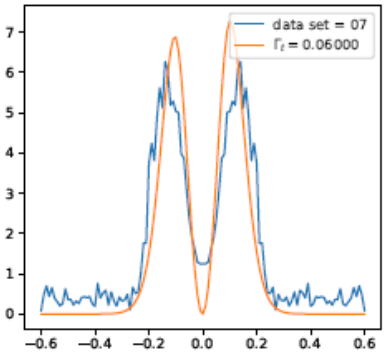
2:1

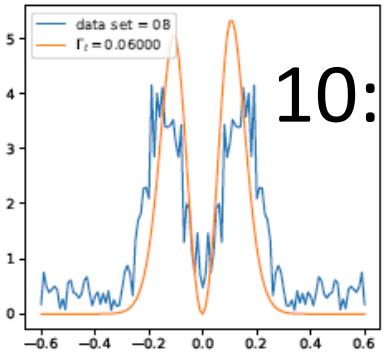

data set = 09
$\Gamma_\ell = 0.08000$


data set = 10
$\Gamma_\ell = 0.10000$

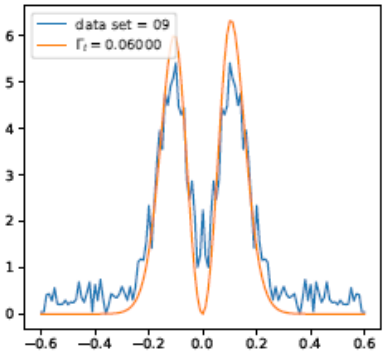

data set = 05
$\Gamma_\ell = 0.03250$

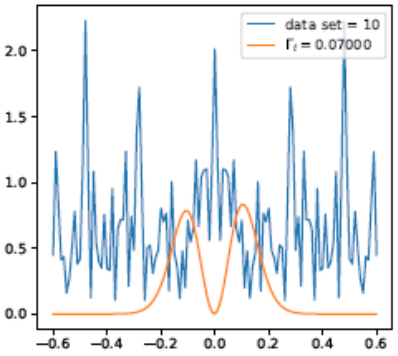

data set = 06
$\Gamma_\ell = 0.05000$


data set = 07
$\Gamma_\ell = 0.06000$

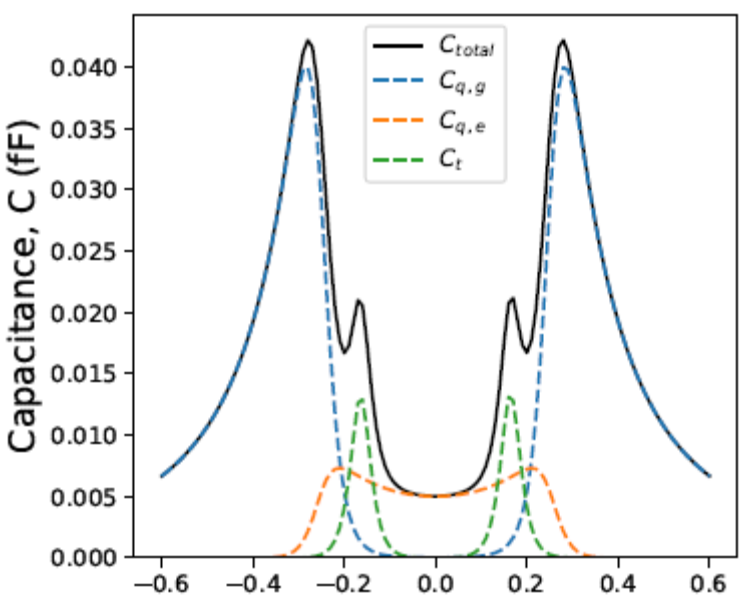

data set = 08
$\Gamma_\ell = 0.06000$

10:1

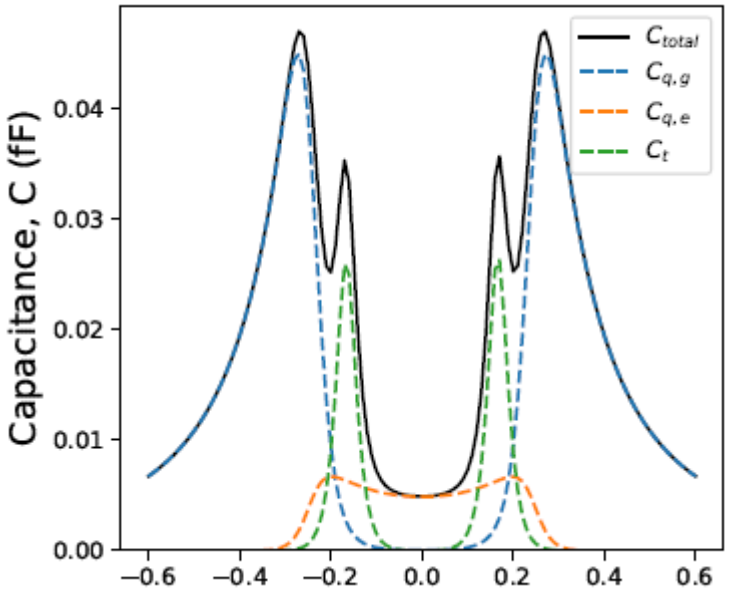

data set = 09
$\Gamma_\ell = 0.06000$


data set = 10
$\Gamma_\ell = 0.07000$

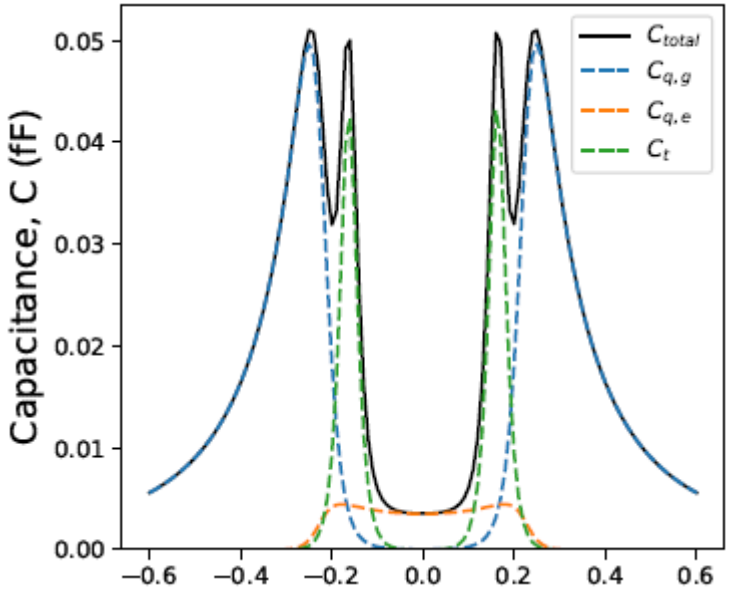
Tunneling Capacitance contribution



1:1



2:1

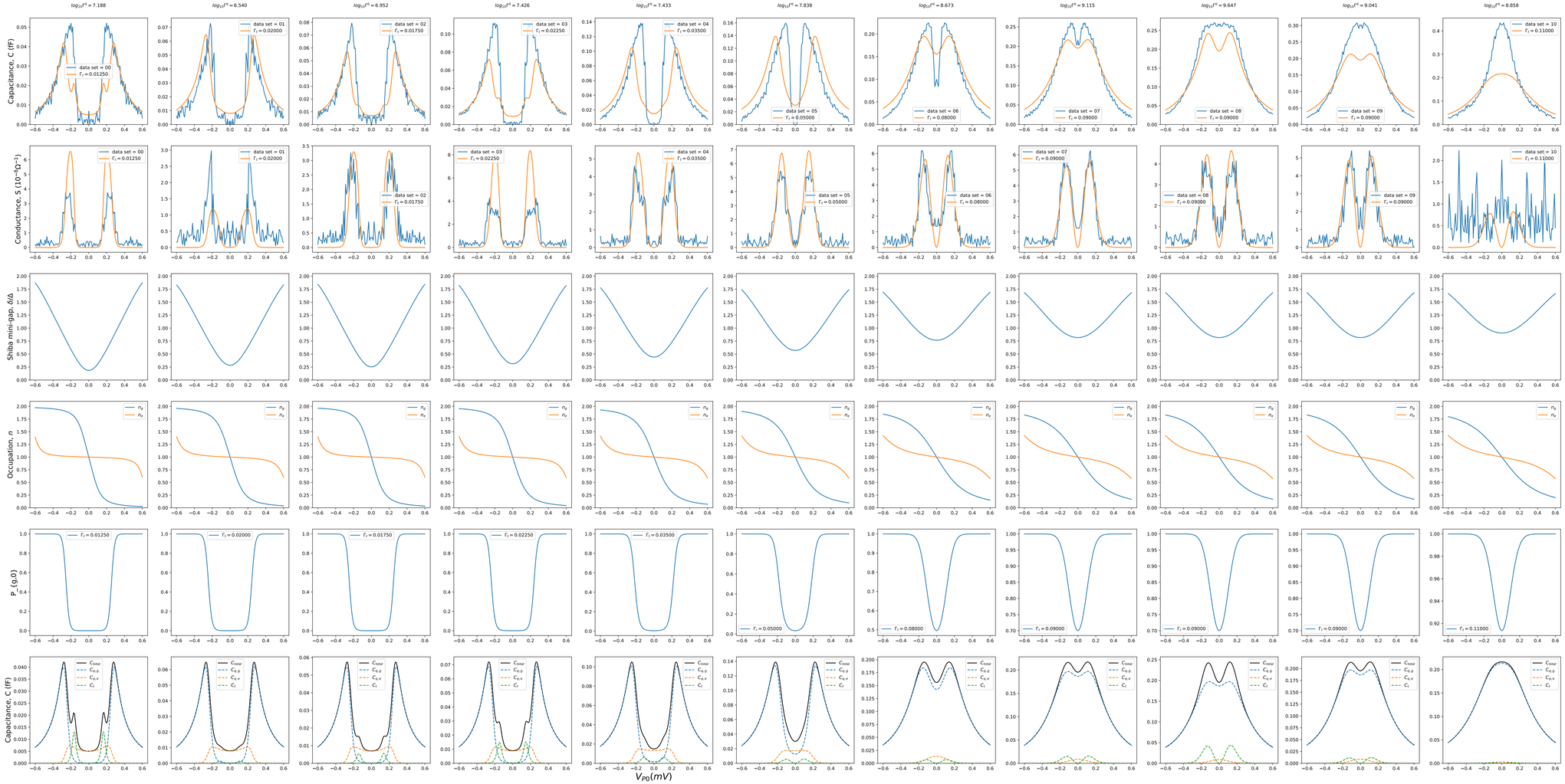


10:1

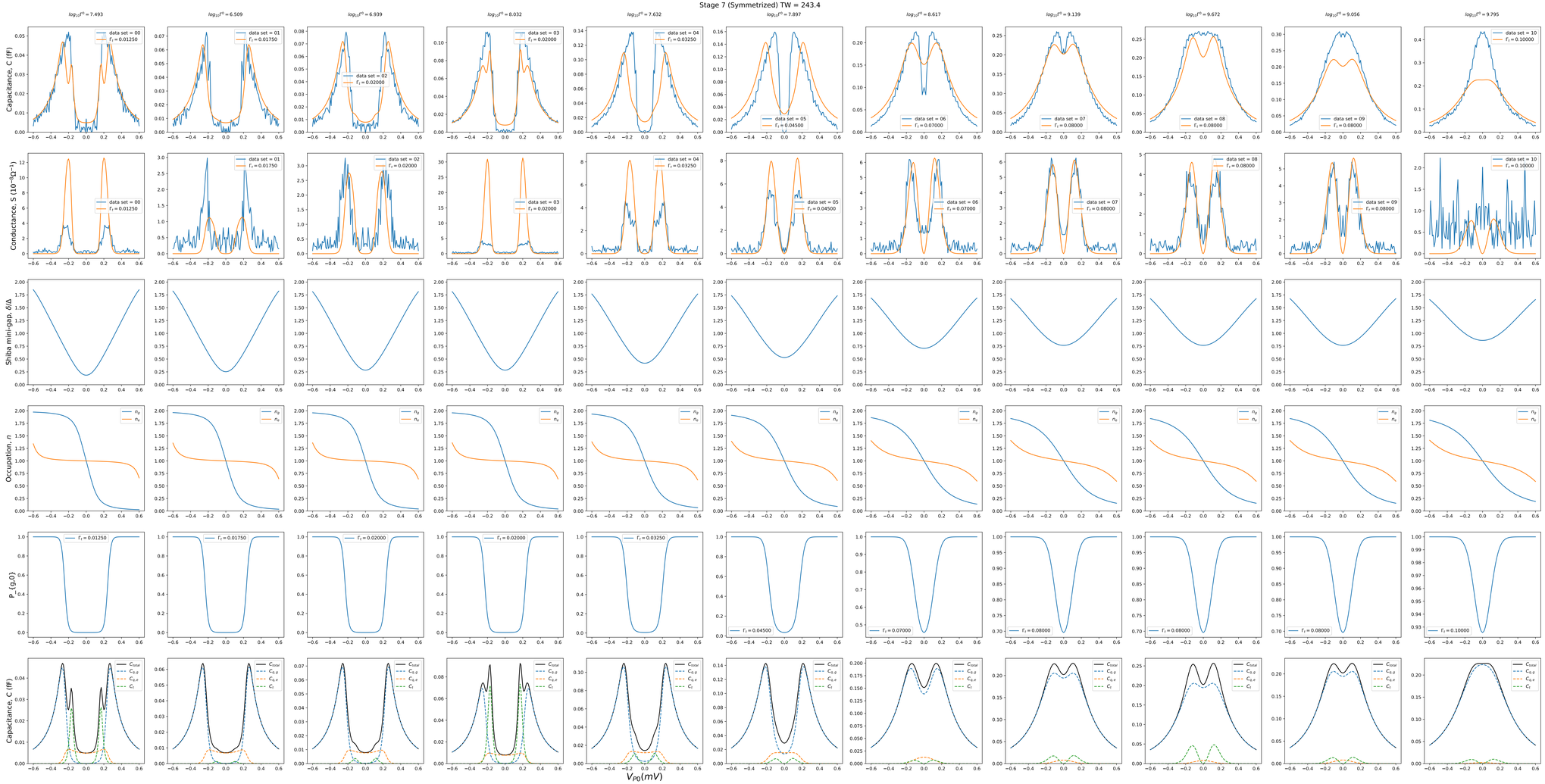
Tunneling Contribution increases when Capacitance contribution increases! This is also captured by the increasing intercept value in slide 1,2,3.

$T = 112.758mK$ $\alpha = 0.625$ $U = 0.416$ $log_{10}N = 5.696$ **C:G = 1:1**

Stage 7 (Symmetrized) TW = 279.2



$T = 109.813mK$ $\alpha = 0.615$ $U = 0.416$ $log_{10}N = 5.481$ C:G = 2:1



$T = 90.769mK$ $\alpha = 0.583$ $U = 0.416$ $log_{10}N = 5.556$ C:G = 10:1