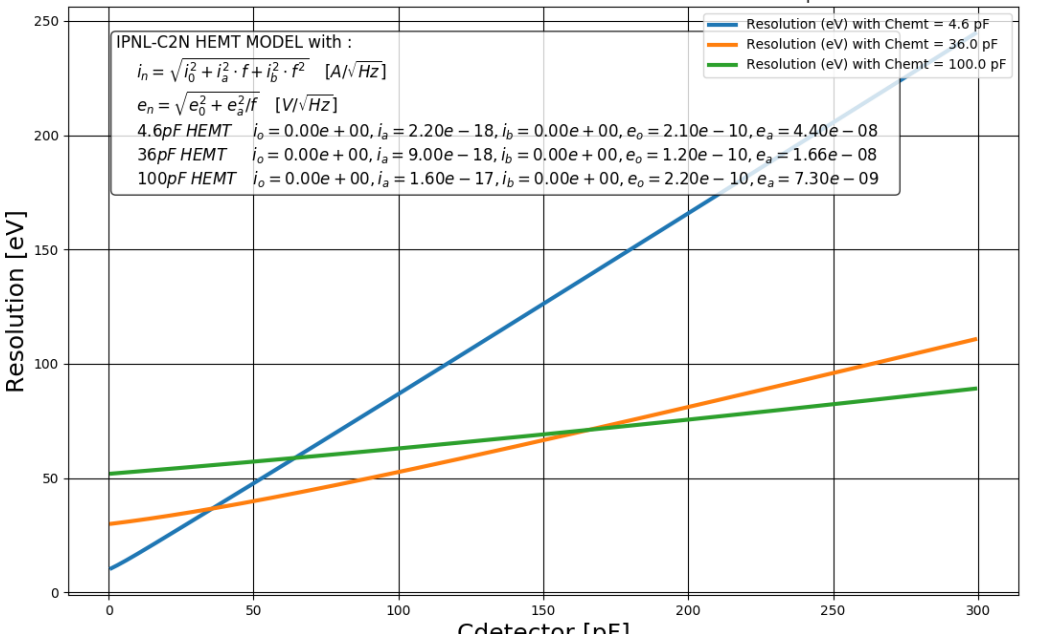
RESOLUTION for Rb=1.00e+10 Tb= 0.02 Rfb=1.50e+10 Tfb= 0.02 Cd=SCAN Cfet=SCAN Cp=1.00e-12 Cc=2.00e-09
Resolution (eV) with Chemt = 4.6 pF
Resolution (eV) with Chemt = 36.0 pF
Resolution (eV) with Chemt = 100.0 pF
IPNL-C2N HEMT MODEL with :
$i_n = \sqrt{i_0^2 + i_a^2 \cdot f + i_b^2 \cdot f^2}$ $[A/\sqrt{Hz}]$
$e_n = \sqrt{e_0^2 + e_a^2/f}$ $[V/\sqrt{Hz}]$
4.6pF HEMT $i_o = 0.00e+00, i_a = 2.20e-18, i_b = 0.00e+00, e_o = 2.10e-10, e_a = 4.40e-08$
36pF HEMT $i_o = 0.00e+00, i_a = 9.00e-18, i_b = 0.00e+00, e_o = 1.20e-10, e_a = 1.66e-08$
100pF HEMT $i_o = 0.00e+00, i_a = 1.60e-17, i_b = 0.00e+00, e_o = 2.20e-10, e_a = 7.30e-09$
Resolution [eV]
Cdetector [pF]
0
50
100
150
200
250
300