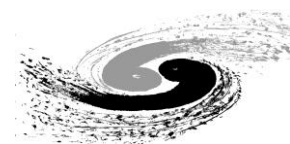


Analog front-end design

Ying ZHANG

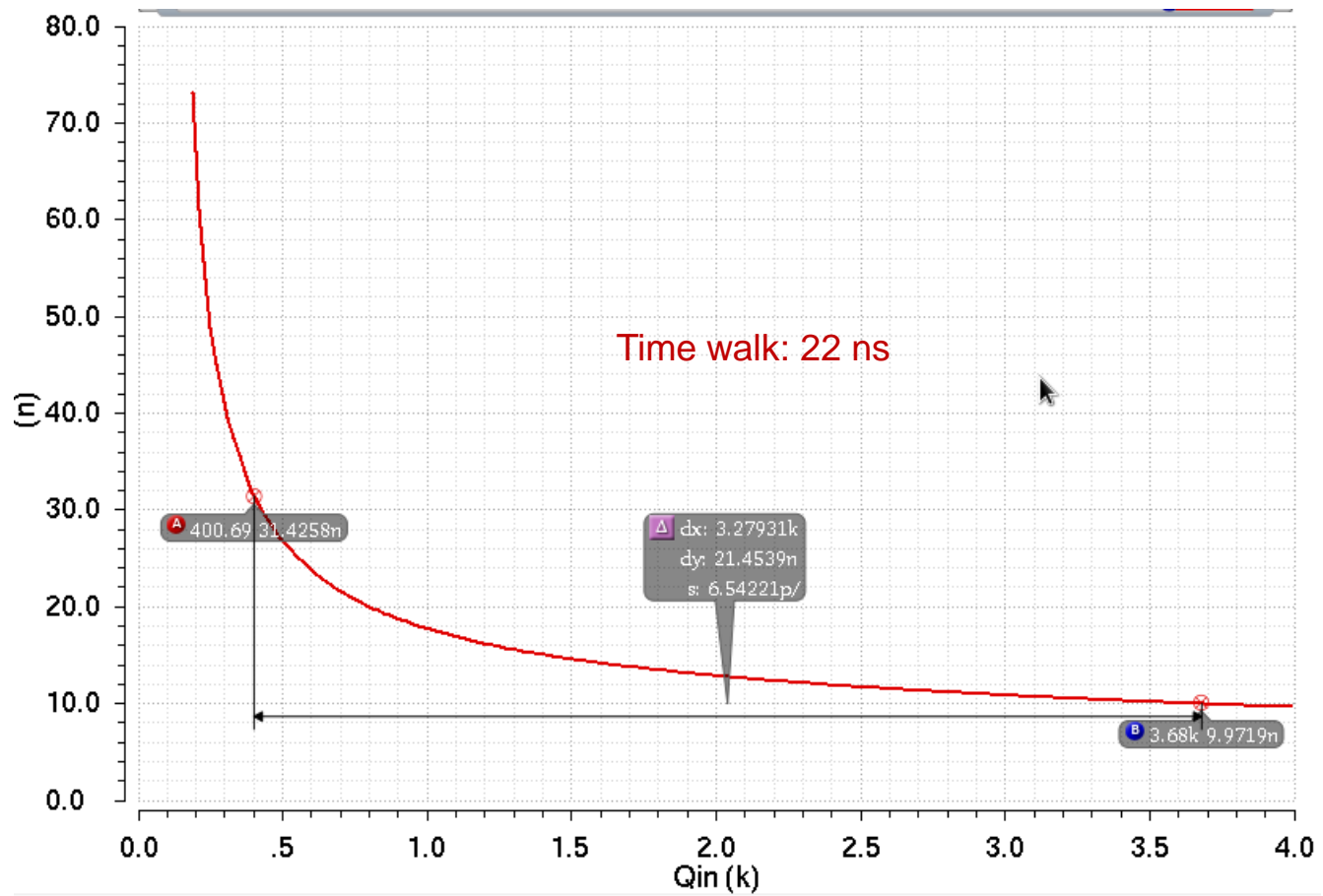
2019-1-7

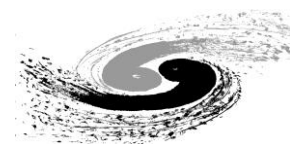


瞬态仿真

- Simulation condition: $C_d = 2.5 \text{ fF}$, $I_{BIAS} = 440 \text{ nA}$

Delay of leading edge vs. input charge vs. charge collection time





瞬态噪声仿真

- 仿真方法：在瞬态仿真中加入瞬态噪声，仿真次数50，输入电荷Qin为80 ~ 150 e⁻，记录不同输入电荷下输出OUT_D的翻转次数，拟合出S曲线

