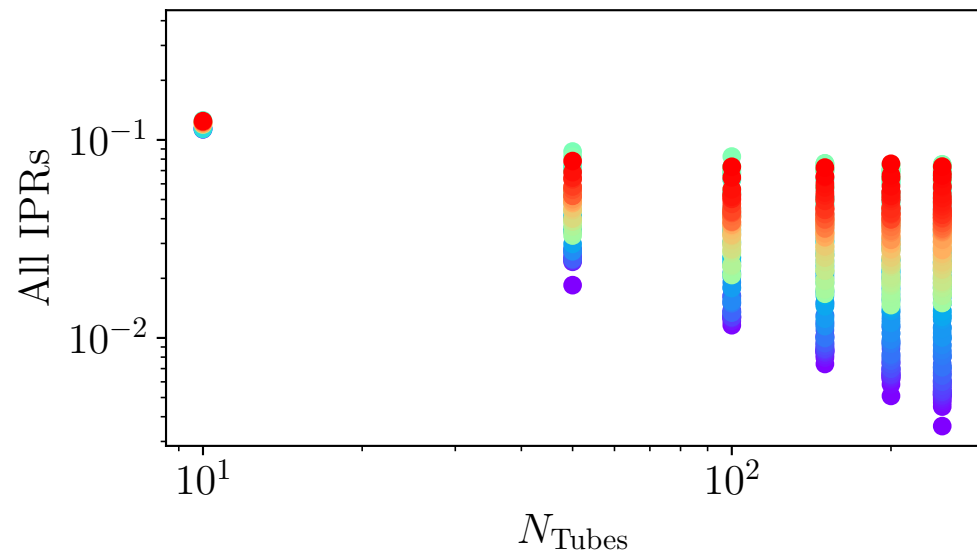$U_d = 0.5, \sigma = 0.5$