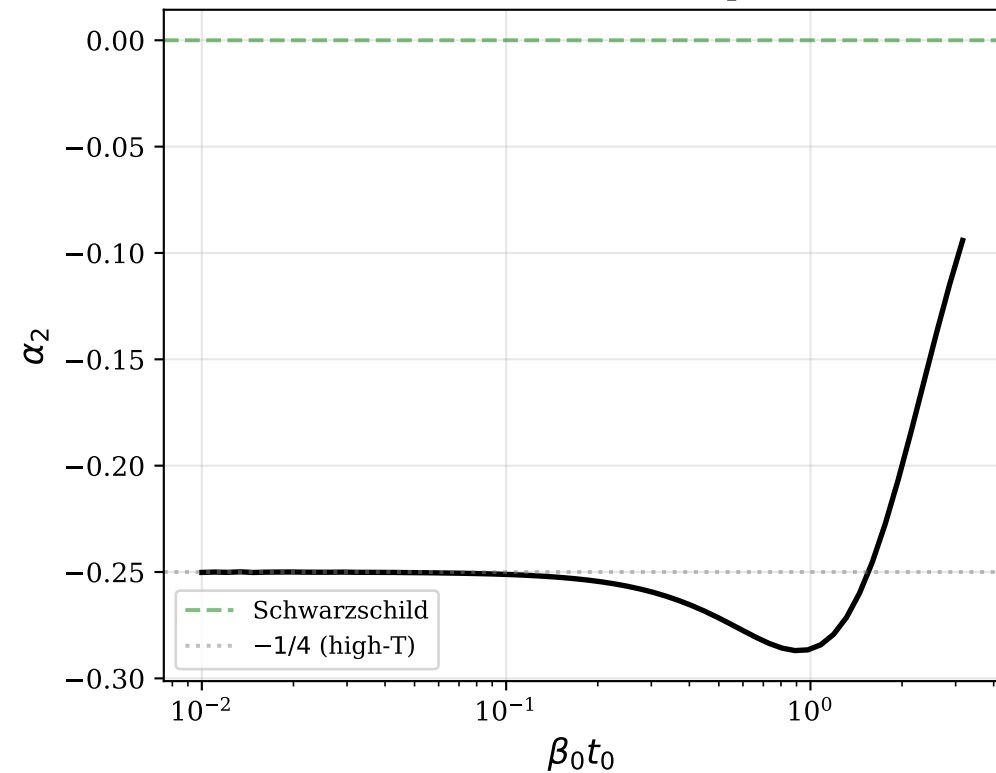
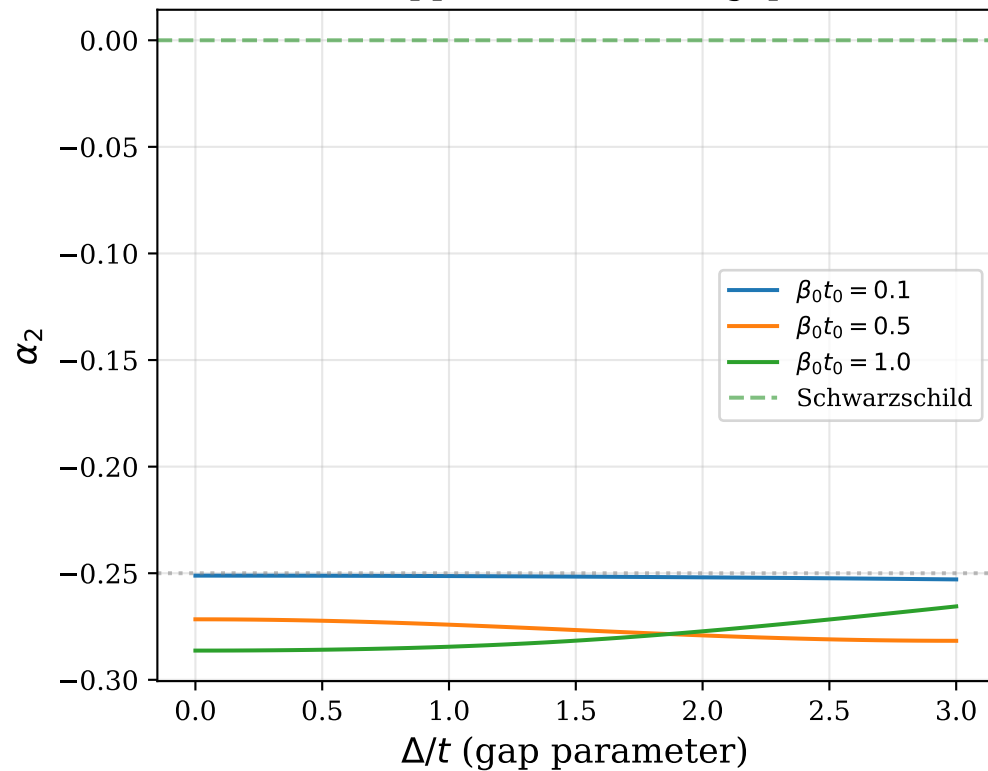


# $\alpha_2 < 0$ universally: the 2PN departure is structural

Uniform chain:  $\alpha_2$  vs temperature



Gapped chain:  $\alpha_2$  vs gap



Dimerized chain:  $\alpha_2$  vs dimerization

