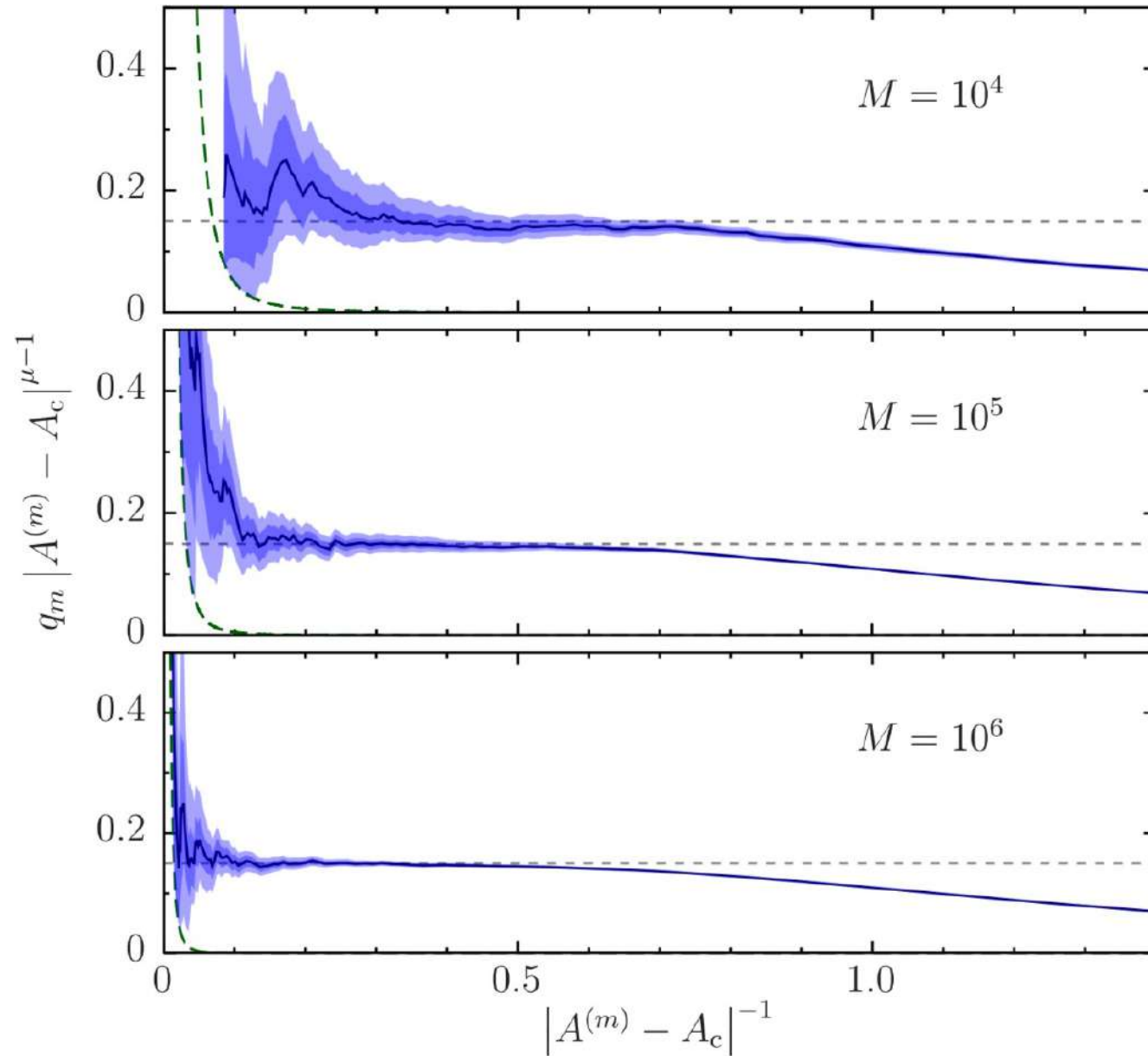


# Tickling the Monte Carlo tail

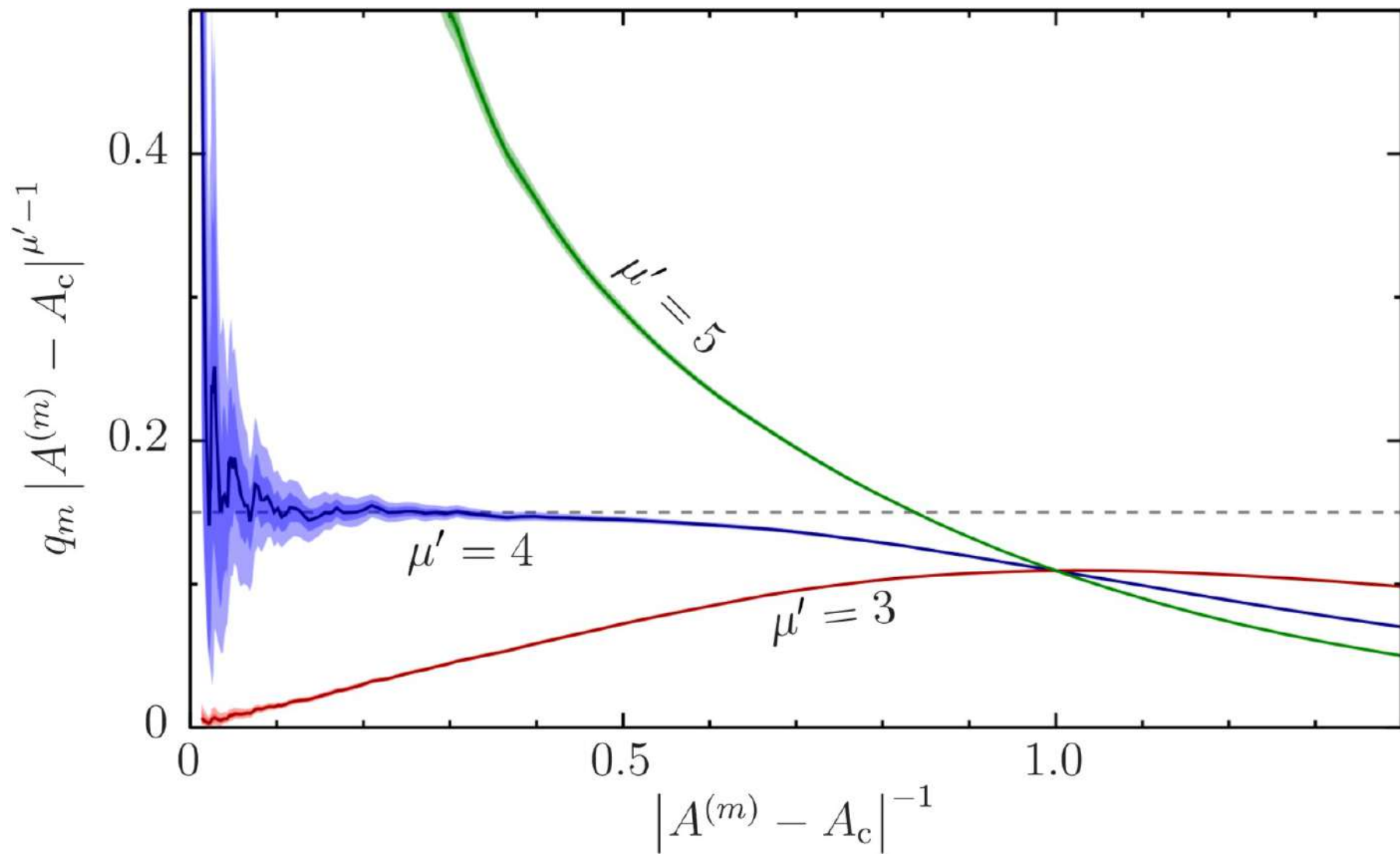
Pablo López Ríos and **Gareth Conduit**

Theory of Condensed Matter group

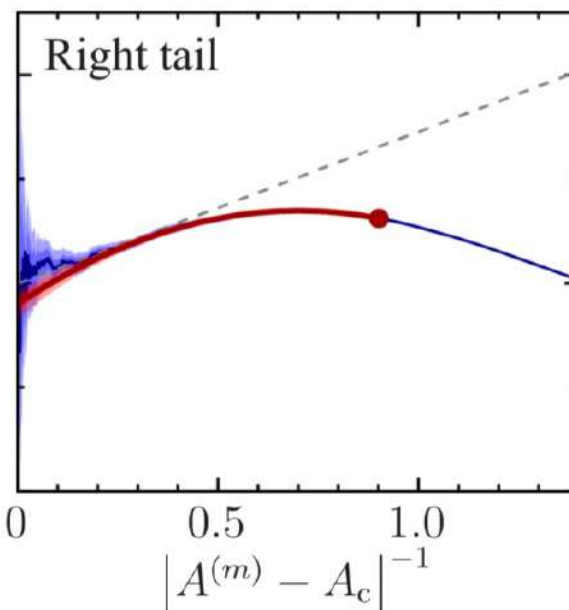
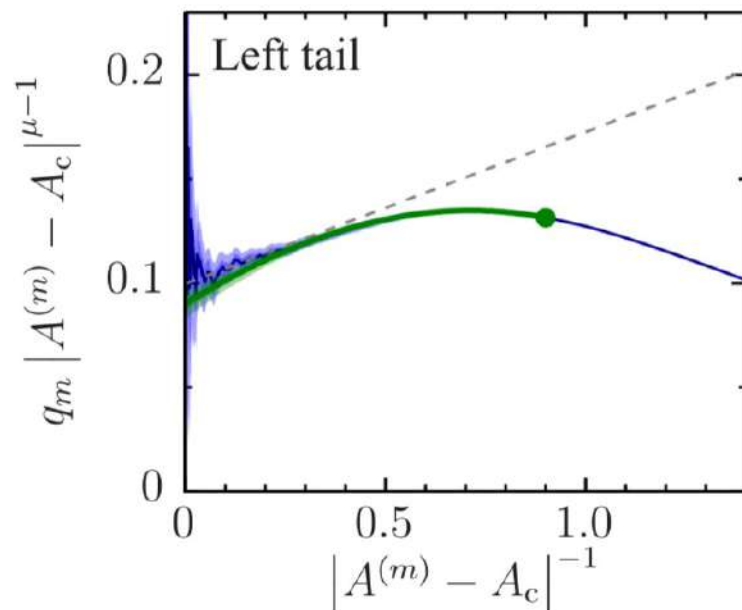
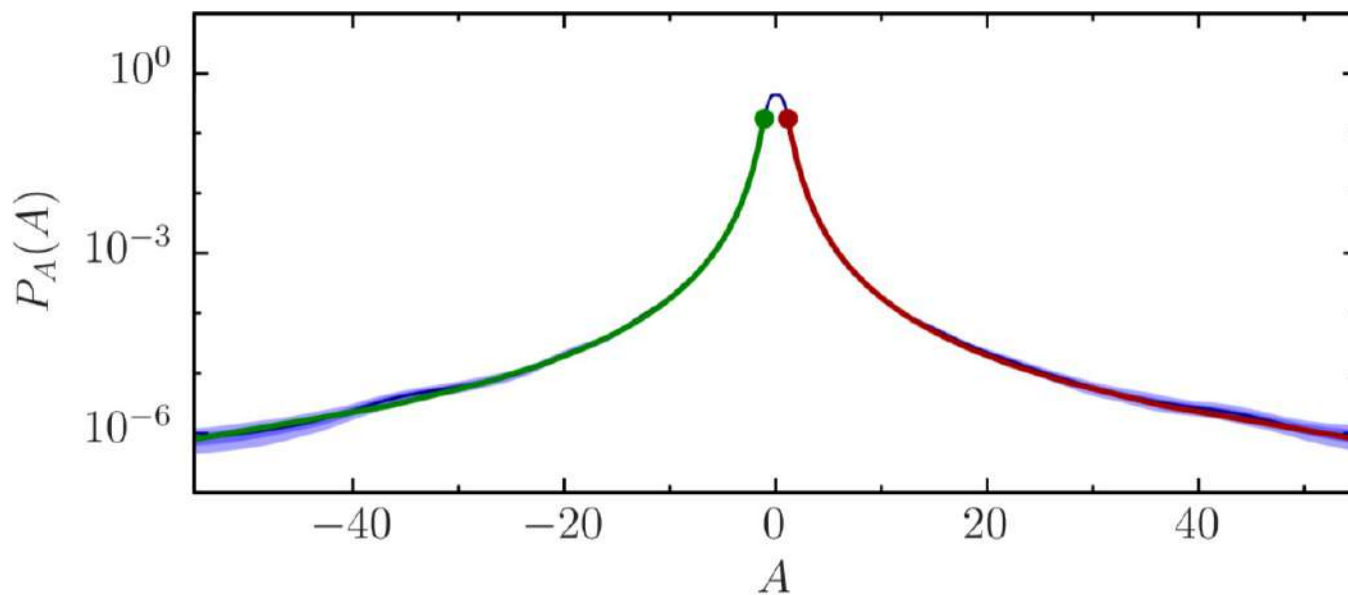
# Tail of $H_4(A)$



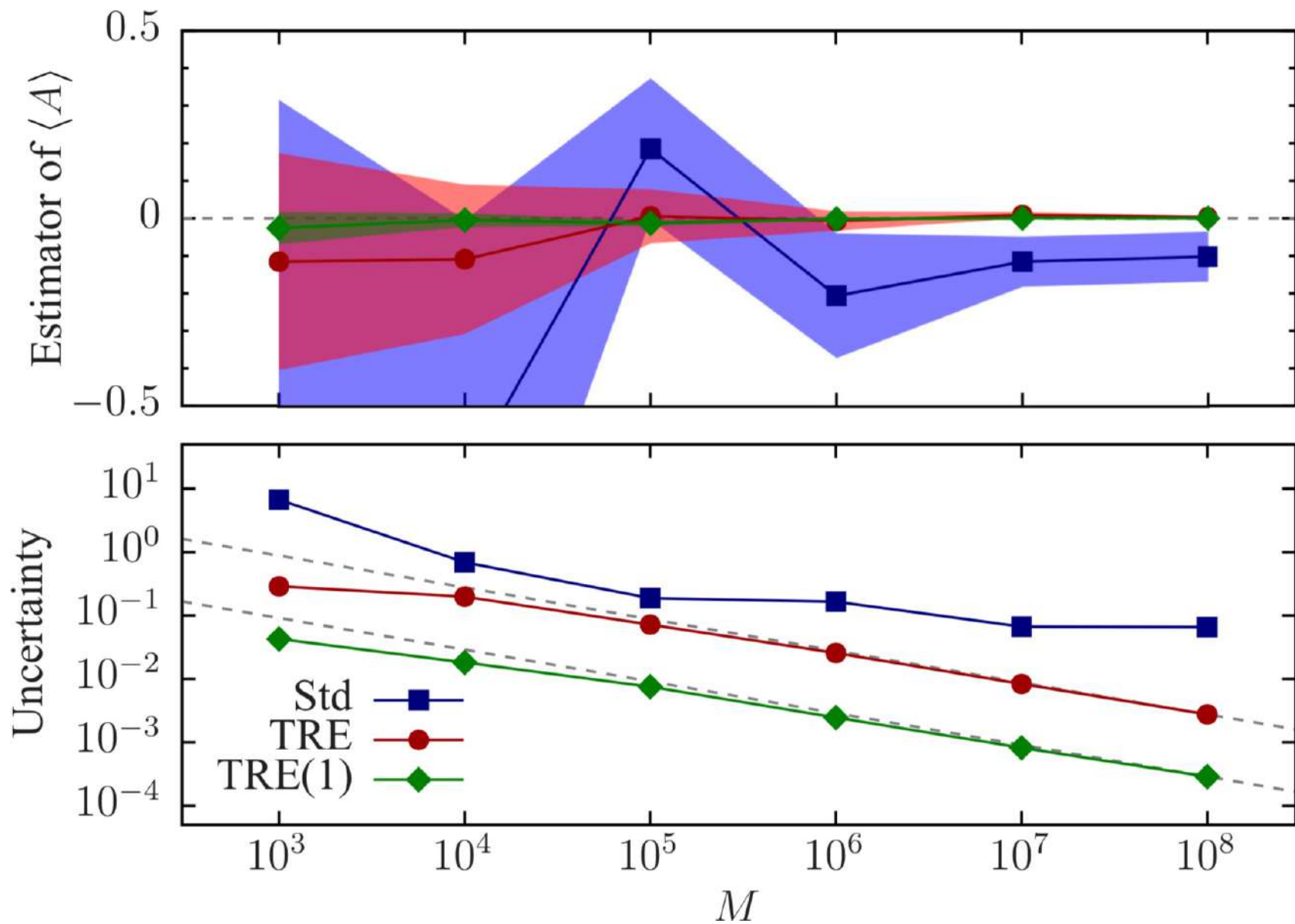
# Tail of $H_4(A)$



# Tail of $[H_{3.1}(A)+H_{4.1}(A)]/2$



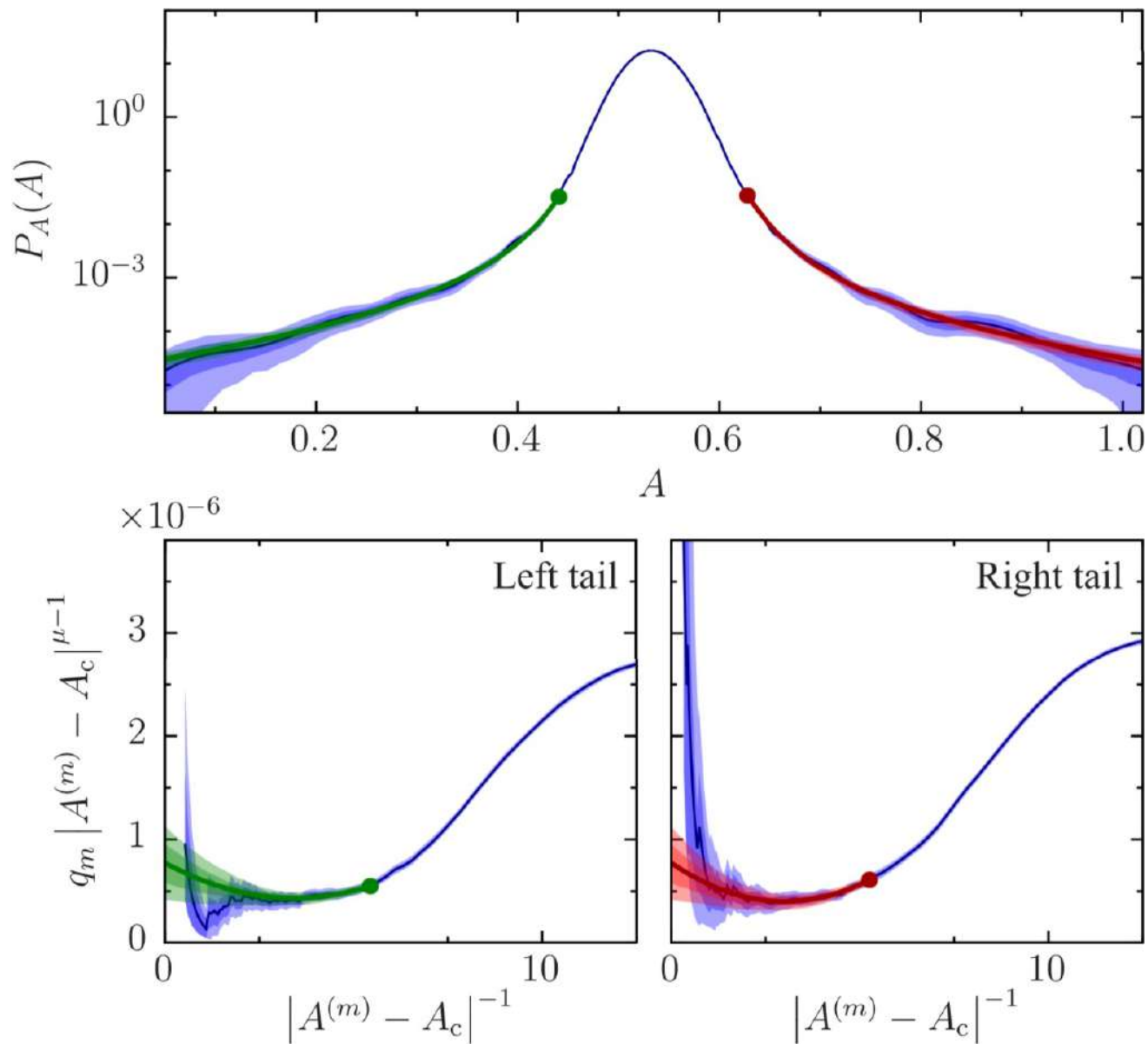
# Behavior of $[H_{2.1}(A)+H_{3.1}(A)]/2$



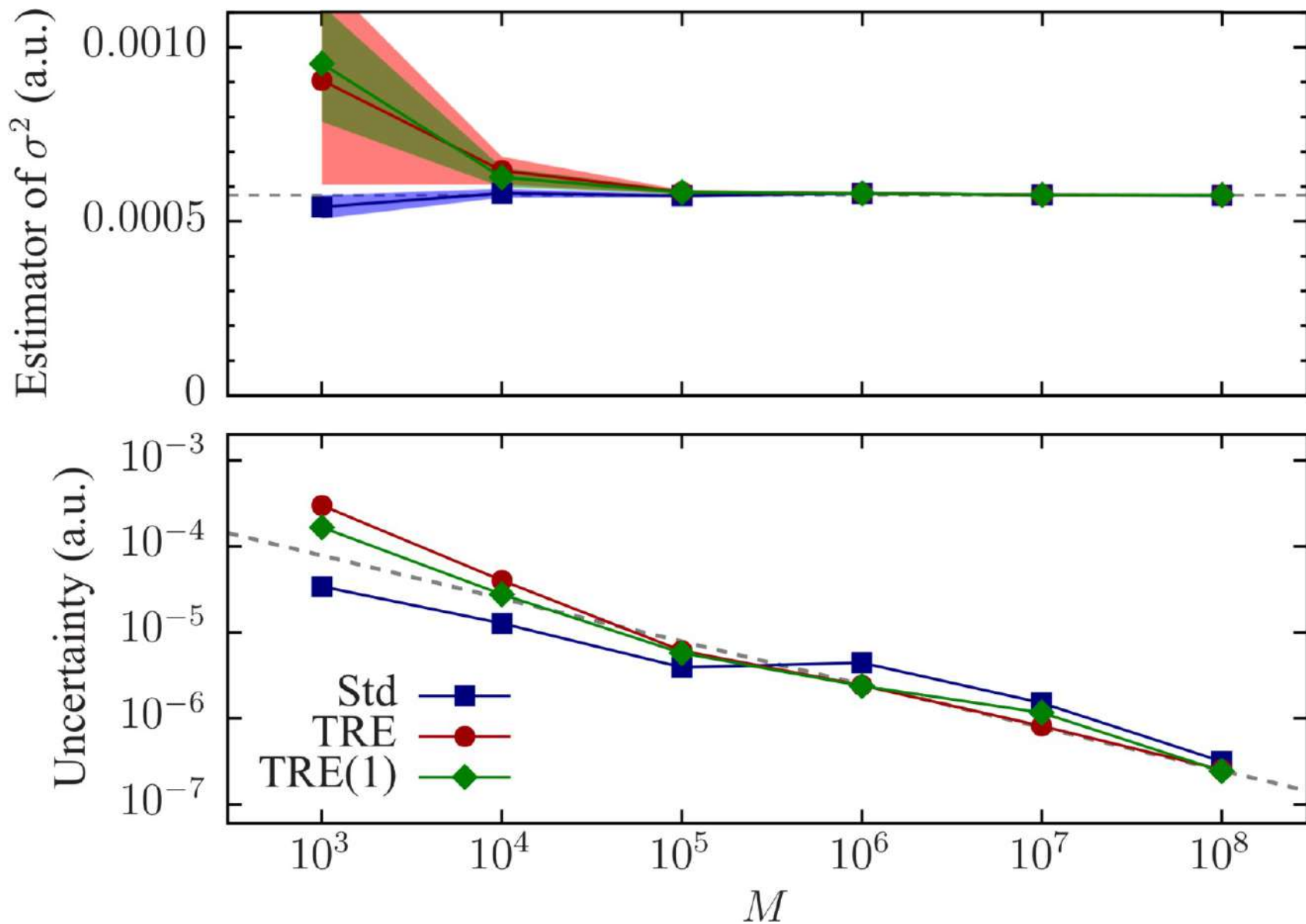
# Behavior of $[H_{1.1}(A)+H_{2.1}(A)]/2$

$M$	Standard	TRE (one constraint)
	$ \bar{A} $	$\mathcal{A}$
$10^3$	$\sim 10^{30}$	$-0.42(55)$
$10^4$	$\sim 10^{28}$	$0.01(18)$
$10^5$	$\sim 10^{39}$	$0.046(68)$
$10^6$	$\sim 10^{48}$	$-0.028(54)$
$10^7$	$\sim 10^{59}$	$-0.019(20)$
$10^8$	$\sim 10^{79}$	$-0.0062(76)$
Exact	0.0	0.0

# Energy of electron gas



# Energy of electron gas





# Force in $C_2$ molecule

