

results of  $t' = 0, U = 6$

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### Abstract

This report contains results of  $t' = 0, U = 6, T = 0.5, 0.25, 0.125$  which are simulated at fixed  $n = 0.3, 0.6$ . We present four physical quantities including energy density  $E$ , kinetic energy density  $K$ , double occupancy density  $D$  and chemical potential  $\mu$ . Three techniques have been used including  $G^2\Gamma$ -scheme,  $[G^{(0)}]^2\Gamma^{(0)}$ -scheme and  $[G^{(0)}]^2U$ -scheme. Extrapolation(in the order  $N$ ) figures are shown in Section 2,3,4, and final results( $N \rightarrow \infty$ ) are shown in Table1, 2, 3.

## 1 Fitting table

Table 1: Extrapolation results:  $G^2\Gamma$  and  $[G^{(0)}]^2\Gamma^{(0)}$  series for  $U = 6, T = 0.5$

	$n$	1.0	0.875	0.8	0.6	0.3
$E$	$G^2\Gamma$	-	-	-	-	-0.777(2)
	$[G^{(0)}]^2\Gamma^{(0)}$	-	-	-	-	-0.779(3)
$K$	$G^2\Gamma$	-	-	-	-	-0.8115(30)
	$[G^{(0)}]^2\Gamma^{(0)}$	-	-	-	-	-0.8112(20)
$D$	$G^2\Gamma$	-	-	-	-	0.0053(5)
	$[G^{(0)}]^2\Gamma^{(0)}$	-	-	-	-	0.0052(5)
$\mu$	$G^2\Gamma$	-	-	-	-	-1.952(10)
	$[G^{(0)}]^2\Gamma^{(0)}$	-	-	-	-	-1.964(10)

## 2 Fitting table

Table 2: Extrapolation results:  $G^2\Gamma$  and  $[G^{(0)}]^2\Gamma^{(0)}$  series for  $U = 6$ ,  $T = 0.25$

$n$		1.0	0.875	0.8	0.6	0.3
$E$	$G^2\Gamma$	-	-	-	-	-0.841(2)
	$[G^{(0)}]^2\Gamma^{(0)}$	-	-	-	-	-0.840(3)
$K$	$G^2\Gamma$	-	-	-	-	-0.877(2)
	$[G^{(0)}]^2\Gamma^{(0)}$	-	-	-	-	-0.878(3)
$D$	$G^2\Gamma$	-	-	-	-	0.0060(5)
	$[G^{(0)}]^2\Gamma^{(0)}$	-	-	-	-	0.0063(7)
$\mu$	$G^2\Gamma$	-	-	-	-	-1.843(10)
	$[G^{(0)}]^2\Gamma^{(0)}$	-	-	-	-	-1.842(20)

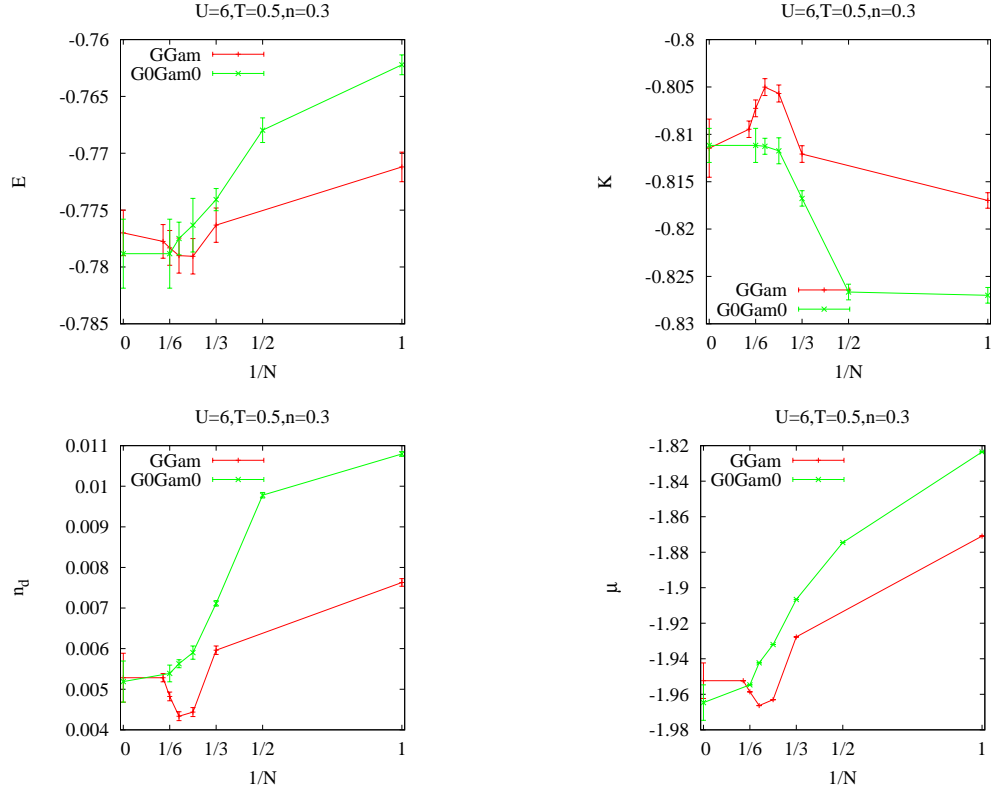
## 3 Fitting table

Table 3: Extrapolation results:  $G^2\Gamma$  and  $[G^{(0)}]^2\Gamma^{(0)}$  series for  $U = 6$ ,  $T = 0.125$

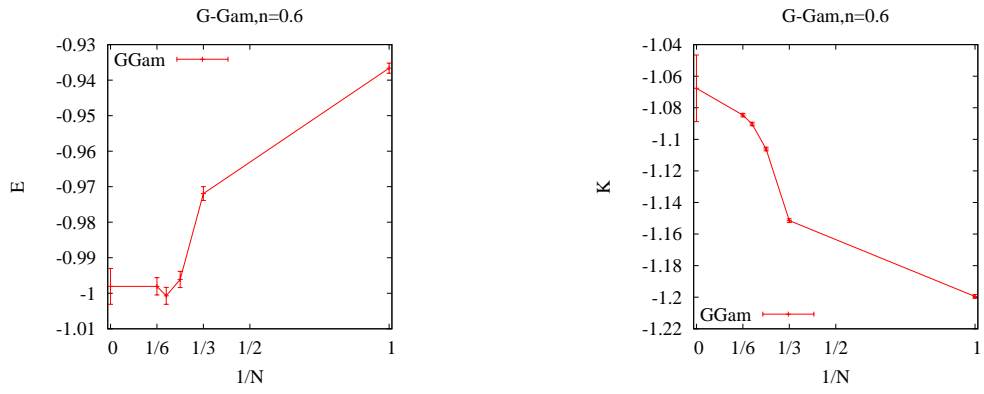
$n$		1.0	0.875	0.8	0.6	0.3
$E$	$G^2\Gamma$	-	-	-	-	-0.858(3)
	$[G^{(0)}]^2\Gamma^{(0)}$	-	-	-	-	-0.855(7)
$K$	$G^2\Gamma$	-	-	-	-	-0.8956(20)
	$[G^{(0)}]^2\Gamma^{(0)}$	-	-	-	-	-0.8965(40)
$D$	$G^2\Gamma$	-	-	-	-	0.0064(5)
	$[G^{(0)}]^2\Gamma^{(0)}$	-	-	-	-	0.0067(6)
$\mu$	$G^2\Gamma$	-	-	-	-	-1.819(10)
	$[G^{(0)}]^2\Gamma^{(0)}$	-	-	-	-	-1.83(2)

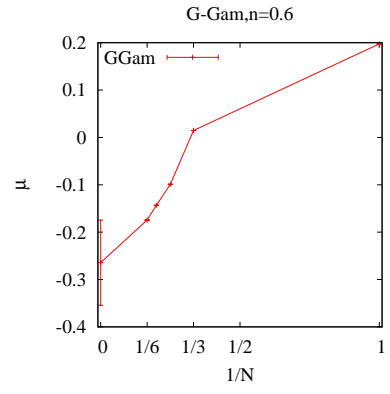
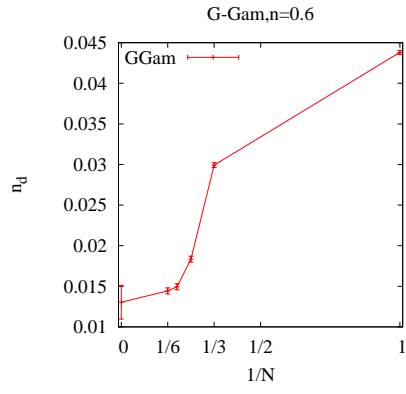
## 4 $T = 0.5$

### 4.1 $T = 0.5, n = 0.3$

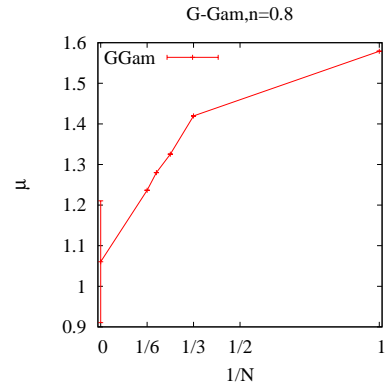
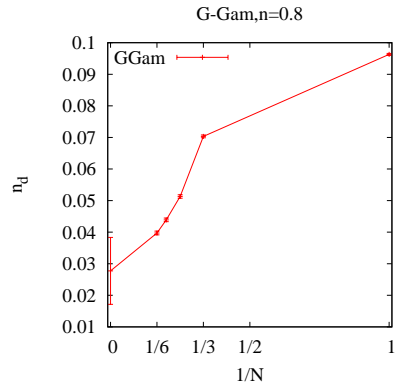
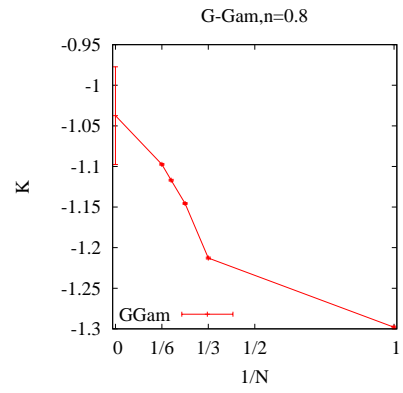
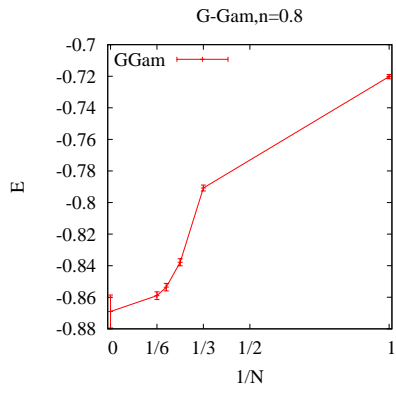


### 4.2 $T = 0.5, n = 0.6$



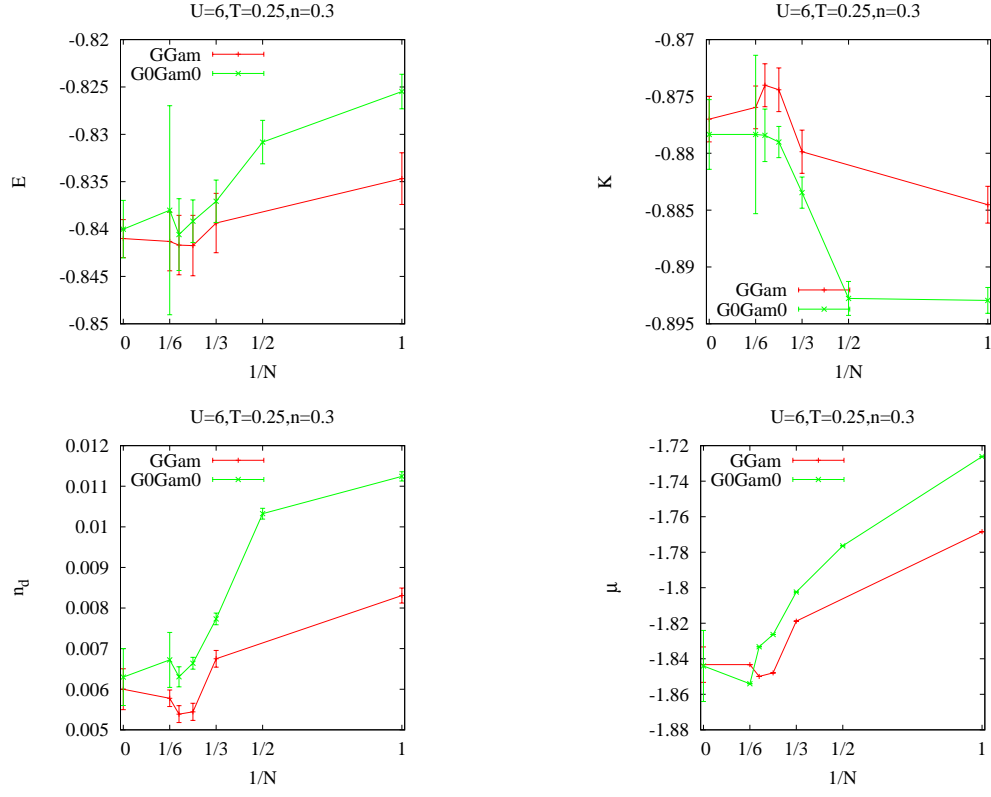


### 4.3 $T = 0.5, n = 0.8$

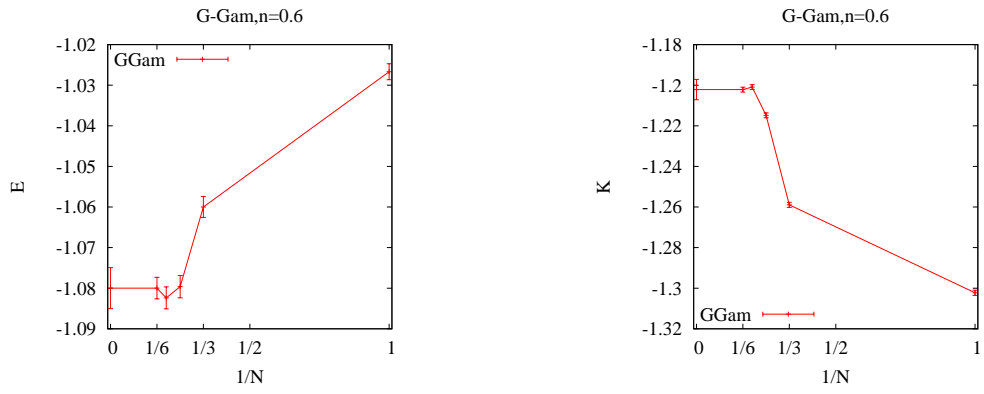


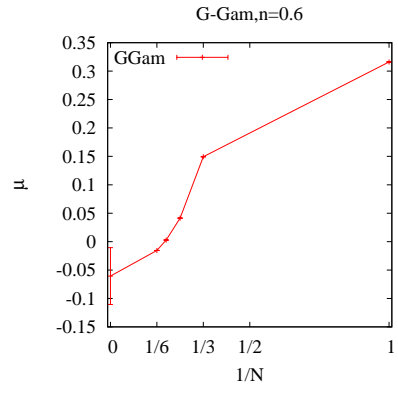
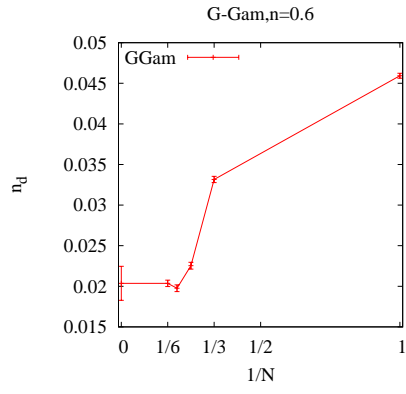
## 5 $T = 0.25$

### 5.1 $T = 0.25, n = 0.3$

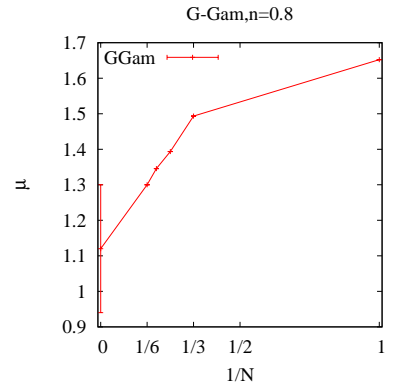
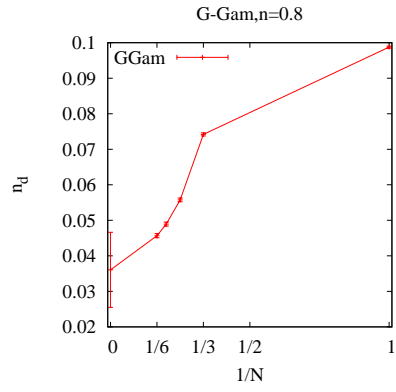
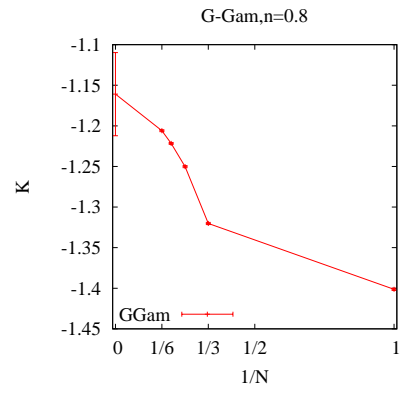
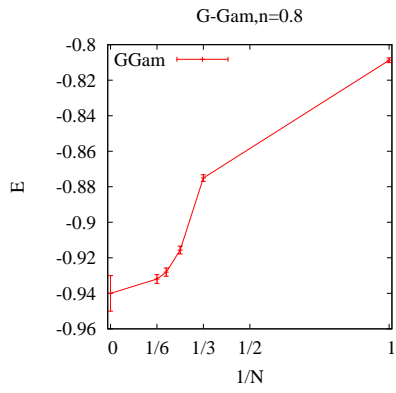


### 5.2 $T = 0.25, n = 0.6$



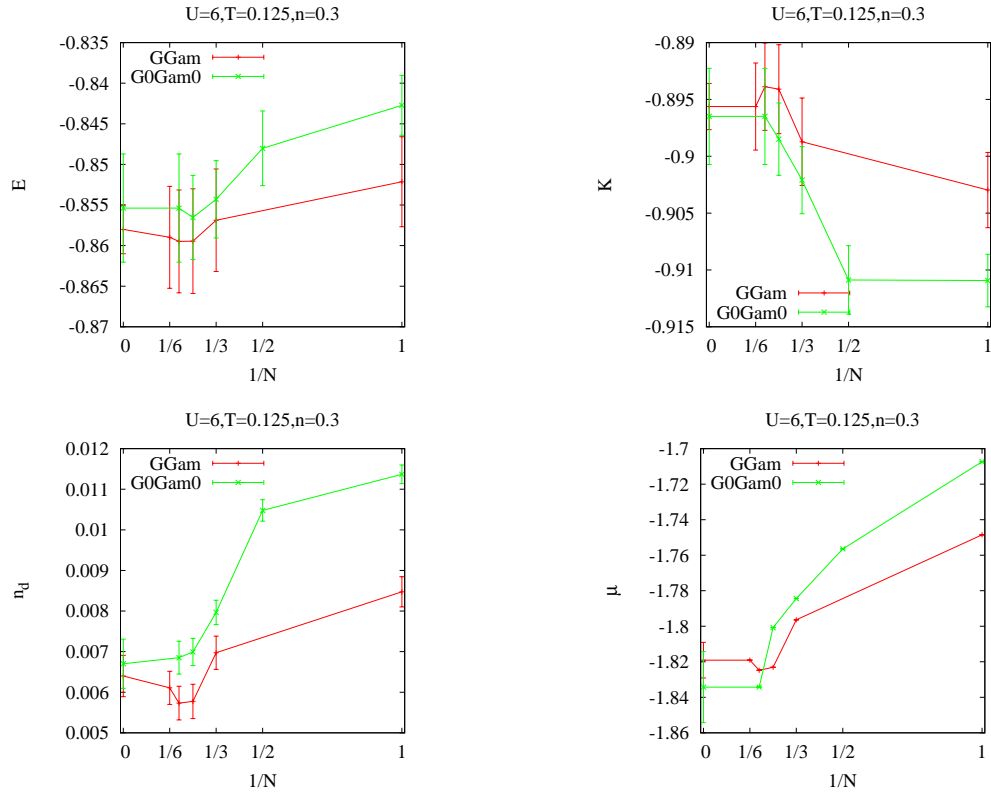


### 5.3 $T = 0.25, n = 0.8$



## 6 $T = 0.125$

### 6.1 $T = 0.125, n = 0.3$



### 6.2 $T = 0.125, n = 0.6$

