

## Erratum: Second generation of composite fermions in the Hamiltonian theory [Phys. Rev. B 69, 155324 (2004)]

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A factor  $n_B^* = 1/2\pi l_B^{*2}$  is missing in Eq. (8). Its corrected version is

$$\mathcal{F}_n^p(q) = n_B^* \sum_{n'=p-n}^{p-1} |\langle n' + n | \bar{\rho}^p(\mathbf{q}) | n' \rangle|^2.$$

This error has led to an overestimation of the screening effect due to inter-composite-fermion-Landau-level excitations. Consequently, screening affects the values of the activation gaps less than originally thought. The corrected values for the gaps with  $s=1$  and  $p=1$  are

$\tilde{s}=1$	$\tilde{p}=1$	$\tilde{p}=2$		$\tilde{s}=2$	$\tilde{p}=1$	$\tilde{p}=2$
$\nu^*$	$1+1/3$	$1+2/5$		$\nu^*$	$1+1/5$	$1+2/9$
$\nu$	$4/11$	$7/19$		$\nu$	$6/17$	$11/31$
$\Delta^a$	0.018	0.0064		$\Delta^a$	0.011	0.0052

and for  $s=2$  and  $p=1$ ,

$\tilde{s}=1$	$\tilde{p}=1$	$\tilde{p}=2$		$\tilde{s}=2$	$\tilde{p}=1$	$\tilde{p}=2$
$\nu^*$	$1+1/3$	$1+2/5$		$\nu^*$	$1+1/5$	$1+2/9$
$\nu$	$4/19$	$7/33$		$\nu$	$6/29$	$11/53$
$\Delta^a$	0.0057	0.0020		$\Delta^a$	0.0041	0.0021

in units of  $e^2/\epsilon l_B$ .

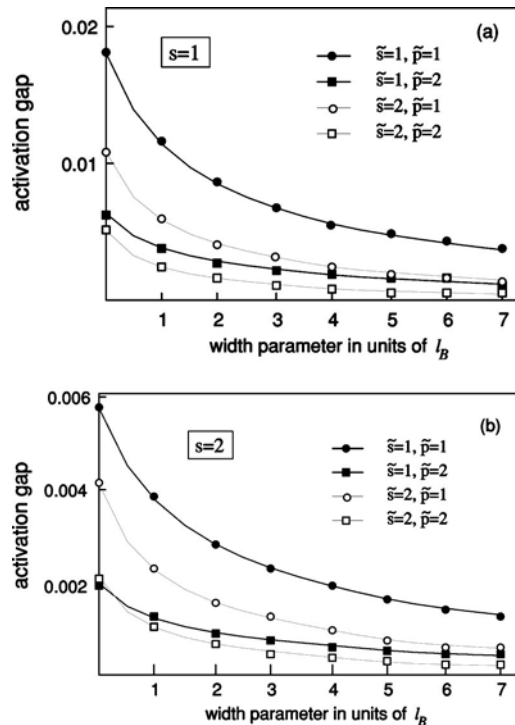


FIG. 1. Activation gaps as a function of width parameter for different fillings. (a)  $s=1$ :  $\nu=4/11$  (black circles),  $\nu=6/17$  (white circles),  $\nu=7/19$  (black squares), and  $\nu=11/31$  (white squares); (b)  $s=2$ :  $\nu=4/19$  (black circles),  $\nu=6/29$  (white circles),  $\nu=7/33$  (black squares), and  $\nu=11/53$  (white squares).

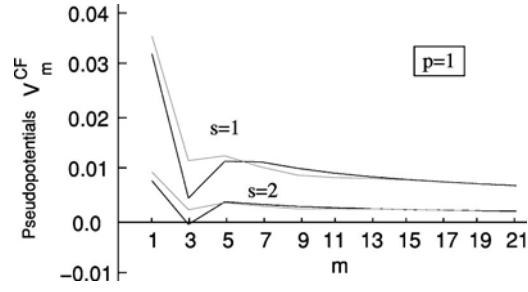


FIG. 2. Haldane's pseudopotentials for  $CF$  interaction both without screening (black line) and with screening (gray line); the lines are a guide to the eyes.

The corrected figures may be found in Figs. 1 and 2. The theoretical estimate for the activation gap at  $\nu=4/11$  for a width parameter  $\lambda \approx 6.3l_B$  is  $\Delta^a(s=1; \bar{s}=\bar{p}=1) \approx 0.004e^2/\epsilon l_B$ , which is on the order of 600 mK. The characteristic minimum of  $V_3^{CF}$  persists even in the presence of screening (Fig. 2). The physical interpretation in the paper remains unchanged.