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Corrigendum: Singularities of the dynamical structure factors of the spin 1/2 XXX chain at finite magnetic field (2015 *J. Phys.: Condens. Matter* **27** 406001)

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We wish to report the following corrections to the manuscript [1]. In the second expression given in its equation (72) there is a sign error, since $\xi^1/2$ should read $-\xi^1/2$. The correct expression thus is,

$$2\Delta'_t(q) = \left(-\frac{\xi^1}{2} + C\Phi(\iota k_{F\downarrow}, q) \right)^2.$$

This correction implies that for $\tau = t$ the exponent $\xi^t(k)$ given in equation (71) of [1] is negative for $k > 0$ at any spin density m value, so that in the corresponding range $k \in [k_t, \pi]$ considered in that paper one has that $k_t = 0$, including in equation (73) for $m \rightarrow 1$. Indeed, the sign error also affects the second expression of equation (75) of [1] valid for $m \rightarrow 1$, which should read,

$$\xi^t(k) = -1/2 - 2\Phi(0, k - \pi)[1 - \Phi(0, k - \pi)].$$

This sign error propagates to the plots of the exponent ξ^t in figures 2–4 of [1]. The exponent ξ^t is called ζ_1^{xx} in [2], being plotted as a function of k/π for a set of spin density values

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in figure 6 of that reference. These plots correct those of the exponent ξ^t in figures 2–4 of [1]; the plots of the spectra and exponent ξ^t also shown in the latter figures remain correct.

A physical consequence of the present sign correction is that there are lower threshold singularity cusps in the corresponding transverse spin dynamical structure factor for the whole momentum range $k \in [0, \pi]$ and not only for $k \in [k_t, \pi]$, with k_t finite and given in [1].

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