Erratum: Disordered asymmetric simple exclusion process: Mean-field treatment [Phys. Rev. E **70**, 016108 (2004)]

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There was a misprint in Eq. (18) which should read

$$w(\varrho) = w\left(\frac{\bar{\gamma}}{1-\varrho}\right)\frac{\bar{\gamma}}{(1-\varrho)^2} + \frac{\sigma_\gamma^2}{2\bar{\gamma}}\frac{d^2}{d\varrho^2}\left[w\left(\frac{\bar{\gamma}}{1-\varrho}\right)\right]. \tag{18}$$

Furthermore, the correct form for $w_1(\varrho)$ is

$$w_1(\varrho) = \frac{2A}{\bar{\gamma}}\frac{\varrho[\bar{\gamma}-(1-\varrho)^2]}{(\varrho^2-\varrho+\bar{\gamma})^3}, \tag{21}$$

leading to

$$\Delta = \frac{\sigma_\gamma^2\left(\dfrac{1}{2}-\bar{\gamma}\right)}{4\bar{\gamma}\left(\bar{\gamma}-\dfrac{1}{4}\right)}. \tag{23}$$

This causes slight changes to the analytical curves in Figs. 6 and 15 but does not substantially alter the conclusions of the paper.