

Corrections to

Olver, P.J., Dispersive quantization, *Amer. Math. Monthly* **117** (2010), 599–610.

Last updated: November 17, 2011.

page 600, equation (2.6), delete minus sign:

$$b_k(0) = \begin{cases} i/(\pi k), & k \text{ odd,} \\ 1/2, & k = 0, \\ 0, & 0 \neq k \text{ even.} \end{cases} \quad (2.6)$$

page 600, equation (2.7), change + to - :

$$u^*(t, x) \sim \frac{1}{2} - \frac{2}{\pi} \sum_{j=0}^{\infty} \frac{\sin((2j+1)x - (2j+1)^3 t)}{2j+1}. \quad (2.7)$$

page 604, equation (2.16), delete  $ikx$ :

$$c_k = b_k \left( \pi \frac{p}{q} \right) = b_k(0) e^{-ik^3 \pi p/q}, \quad (2.16)$$

page 604, equation (2.17), delete  $ikx$  and  $ilx$ :

$$\text{if } k \equiv l \pmod{2q}, \text{ then } k^3 \equiv l^3 \pmod{2q}, \text{ and so } e^{-ik^3 \pi p/q} = e^{-il^3 \pi p/q}. \quad (2.17)$$

page 605, equation (2.18), insert  $(-1)^k$  in sum:

$$F(t, x) \sim \frac{1}{2\pi} \sum_{k=-\infty}^{\infty} (-1)^k e^{i(kx - k^3 t)}. \quad (2.18)$$

page 605, Corollary 4: change  $u(0, x_j) = f(x_j)$  to  $u(0, x + x_j) = f(x + x_j)$ .

page 605, equation (2.20), insert  $i$  in initial fraction and  $(-1)^k$  in sum:

$$G(t, x) = \int_0^x \left( F(t, y) - \frac{1}{2\pi} \right) dy \sim \frac{1}{2\pi i} \sum_{0 \neq k = -\infty}^{\infty} \frac{(-1)^k}{k} e^{i(kx - k^3 t)}, \quad (2.20)$$

page 607, equation (3.4), insert  $i$  in initial fraction and  $(-1)^k$  in sum:

$$u = G(t, x) = \frac{1}{2\pi i} \sum_{0 \neq k = -\infty}^{\infty} \frac{(-1)^k}{k} e^{i(kx + k^2 t)}.$$

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