ISSN 0021-3640, JETP Letters, 2016, Vol. 104, No. 4, p. 287. © Pleiades Publishing, Inc., 2016.

ERRATUM

Erratum to: "Nonlinear Generation of Vorticity in Thin Smectic Films" [JETP Letters 103, 201 (2016)]

V. M. Parfenyev*, S. S. Vergeles, and V. V. Lebedev

Landau Institute for Theoretical Physics, Russian Academy of Sciences, Chernogolovka, Moscow region, 142432 Russia

** e-mail: parfenius@gmail.com*

Received July 12, 2016

DOI: 10.1134/S0021364016160116

The right-hand side of Eq. (16) should be

$$\left\langle (\partial_\alpha h \partial_z \varpi_\alpha)^{II} - (\partial_\alpha h \partial_z \varpi_\alpha)^{I} \right\rangle.$$

This contribution appears because quantities on the surface of the film appear in Eq. (9) and the height of film elevation $h(x, y, t)$ depends on the horizontal coordinates. In particular,

$$\partial_\alpha v_\beta(x, y, h) = \partial_\alpha v_\beta(x, y, z)\,|_{z=h} + \partial_z v_\beta(x, y, h)\partial_\alpha h,$$

but the last term (and similar terms) was disregarded in the corrected work.

Resulting expression (17) should read as follows:

$$\varpi_z = \epsilon_{\alpha\beta}\left\langle \left(e^{\mp\hat{\kappa}z}\frac{\hat{\kappa}}{\hat{k}}\partial_\alpha h\right) e^{\mp\hat{k}z}\partial_\beta \partial_t h\right\rangle$$
$$+ \frac{\epsilon_{\alpha\beta}}{2}\hat{k}^{-1}e^{\mp\hat{k}z}\left\langle (\partial_\beta \partial_t \hat{k}^{-1}h)\hat{\kappa}\hat{k}\partial_\alpha h - \left(\frac{\hat{\kappa}}{\hat{k}}\partial_\beta h\right)\partial_\alpha \partial_t \hat{k} h\right\rangle.$$

The factor $\Theta/2$ in Eq. (20) should be replaced by 1.

Since the main results of the work were based on the analysis of Eqs. (19) and (20), they remain valid with small changes indicated above.

Translated by R. Tyapaev