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ERRATA

Erratum: Low-frequency instabilities in the high-pressure regime of Penning discharges [J. Appl. Phys. 49, 5809 (1978)]

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Equations (7), (17), and (19) should read

$$nv_{e\perp} = -D_{e\perp}\nabla_\perp n + nb_{e\perp}\nabla_\perp V - D_{e\perp}\alpha_e(\hat{b}\times\nabla n)_\perp + nb_{e\perp}\alpha_e(\hat{b}\times\nabla V)_\perp + (nb_{e\perp}/2e)\nabla_\perp T_e - (nb_{e\perp}/e)\alpha_e(\hat{b}\times\nabla T_e)_\perp, \quad (7)$$

$$\omega = \left[\bar{Z} + \frac{\chi}{R}\frac{b_{e\perp}}{e}\frac{\overline{\partial T_e}}{\partial r} + \frac{\eta}{R}\left(\frac{\pi k R^2}{2\beta_{01}^2 L_z}\right)^2 \frac{b_e^2}{b_{i\perp}}\frac{\overline{\partial V}}{\partial r} - \bar{D}_e k^2 - \frac{\pi k^2 R^2}{2\beta_{01}^2 L_z}\frac{b_e^2}{b_{i\perp}}\frac{\overline{\partial V}}{\partial z} - \frac{\beta_{01}^2}{R^2} \right.$$
$$\left. \times(\bar{\phi}_e + \phi_i)\, b_{e\perp} - \left(\frac{\pi k b_e R}{2\beta_{01} L_z b_{i\perp}}\right)^2 D_{i\perp}\right] + i\left[\frac{\pi k}{2L_z}\frac{b_e}{b_{i\perp}}(\bar{D}_{e\perp} - D_{i\perp}) \right.$$
$$\left. + \frac{\pi k b_e R}{2\beta_{01}^2 L_z}\left(\eta\frac{\overline{\partial V}}{\partial r} - \chi\frac{b_{e\perp}}{e b_{i\perp}}\frac{\overline{\partial T_e}}{\partial r}\right) - k b_e \frac{\overline{\partial V}}{\partial z}\right], \quad (17)$$

$$\omega = \frac{1}{A_1}\left\{ -\frac{\alpha_e b_{e\perp}}{\alpha_i}\{[\eta + (1+\alpha_i) m C_m] B_1\}\frac{1}{R}\frac{\overline{\partial V}}{\partial r} + \frac{\chi}{R}\frac{b_{e\perp}}{e}(A_1 + B_1)\frac{\overline{\partial T_e}}{\partial r} - (A_1 + B_1)\bar{D}_e k^2 \right.$$
$$\left. + \bar{Z}\left[A_1 + \left(1 - \frac{\alpha_e b_{e\perp}}{\alpha_i b_{i\perp}}\right)B_1\right] + k b_e F_1 \frac{\overline{\partial V}}{\partial z} - \frac{\beta_{m1}^2}{R^2}\left[A_1 + \left(1 - \frac{\alpha_e \phi_i}{\alpha_i \bar{\phi}_e}\right)B_1\right]\bar{D}_{e\perp}\right\}$$
$$+ \frac{i}{A_1}\left(-(\eta b_{i\perp} F_1 + m\alpha_e b_{e\perp} A_1)\frac{1}{R}\frac{\overline{\partial V}}{\partial r} + \frac{\chi}{R}\frac{b_{e\perp}}{e}F_1\frac{\overline{\partial T_e}}{\partial r} \right.$$
$$\left. - F_1 \bar{D}_e k^2 - (A_1 + B_1) k b_e \frac{\overline{\partial V}}{\partial z} - \frac{\beta_{m1}^2}{R^2}F_1(\bar{D}_{e\perp} - D_{i\perp})\right). \quad (19)$$

Furthermore, B_1 in Eq. (15) should be

$$B_1 = \alpha_i\, b_{i\perp}\left((\alpha_i\, b_{i\perp} - \alpha_e b_{e\perp}) + \frac{\pi k b_e R^2}{m\beta_{01} L_z}\right),$$

and the value of $b_{i\perp}$ is 9.37×10^4 cm²/V sec instead of 1.37×10^4 cm²/V sec as appeared on p. 5814.

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