

we see that Eqs. (1) and (2) are transformed into

$$-4\beta z^{2\alpha+2\beta-1}ff'' + 4(\alpha+\beta)z^{2\alpha+2\beta-1}(f')^2 = 8\eta z^{2\alpha+\beta}f''' + 8z^{2\alpha+\beta}f'' + z^{n+\gamma}g, \quad (6)$$

$$z^{\alpha+\beta+\gamma-1}[-\beta fg' + (n+\gamma)f'g] = (2/Pr)(g' + \eta g'')z^{\alpha+\gamma}. \quad (7)$$

Thus, for the similarity transformation

$$\beta=1 \quad \text{and} \quad \gamma=2\alpha-n+1. \quad (8)$$

In order that the boundary condition on temperature be free from z we should have $\alpha=\frac{1}{2}(n-1)$. Then, the equation for the surface is

$$r^2 z^{(n-1)/2} = r_0 \text{ (const)}. \quad (9)$$

The final form of the governing equations is

$$8\eta f'''' + 8f'' + 4ff'' - 2(n+1)(f')^2 + g = 0, \quad (10)$$

$$\eta g'' + g' = \frac{1}{2}Pr(\eta f'g - fg') \quad (11)$$

with

$$f(r_0) = f'(r_0) = 0, \quad g(r_0) = 1,$$

$$f'(\infty) = g(\infty) = 0. \quad (12)$$

We have noticed an error in the paper by Cebeci and Na. Scrutiny of Eq. (6) of their paper shows that the factor r^{-1} is missing in all the terms except the last one. Even under the transformations given by (12), it is not possible to obtain the momentum equation in the form given by (14). However, the equation as given by (14) of their paper is correct according to the transformations of this paper for $n=0$. The energy equation (15) given by them is also incorrect.

¹T. Cebeci and T. Y. Na, *Phys. Fluids* **12**, 463 (1969).

Reply to Comments by T. Govindarajulu

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The authors agree with Govindarajulu that a misprint appears in Eq. (16) of their paper.¹ The errors were due primarily to a mistake in the typing stage. As a result, the following corrections are necessary:

(i) The last term in Eq. (6) should be $r\theta$, instead of θ .

(ii) Equation (15) should be

$$g'' + (\frac{1}{2}Pr + 1)(g'/\eta) = 0. \quad (15)$$

(iii) All the threes (3's) between Eqs. (10) and (13) should be replaced by the number four (4).

(iv) Owing to the mistakes in Item (iii), the correct form of Eqs. (18) and (23) should be

$$(\tau_w/\frac{1}{2}\rho u_0^2)(Re^{5/2}/Gr) = 8r_0 f''(r_0) \quad (18)$$

and

$$\overline{Nu}(Re/Gr)^{1/2} = -4r_0 g'(r_0). \quad (23)$$

It should be emphasized, however, that the numerical solutions are based on the correct form of Eq. (14) and (15) [or Eqs. (10) and (11) in the comment] and the final numerical results are, therefore, still valid.

¹T. Cebeci and T. Y. Na, *Phys. Fluids* **12**, 463 (1969).

Comments on "Production and Propagation of Plasmoids in a Nonlinear Alfvén Wave"

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In Ref. 1 Wells and Norwood found conditions for the stability of an incompressible plasmoid with free

boundary moving with uniform velocity in an otherwise uniform magnetic field.¹ I feel that the paper