statistical mechanics) and transport phenomena (with its complement, nonequilibrium statistical mechanics).

Evidence for (1) is the degree of consolidation already attained, distinctly, by the Jaynes–Tribus and Hatsopoulos–Keenan approaches. Also, modes for incorporating the concept of "information" into the Hatsopoulos–Keenan approach are becoming apparent, thereby, providing a link for consolidation.

Evidence for (2) includes (a) the initial development of relationships for transport properties via information theory applied to steady-state processes; (b) the re-emergence of interest in "irreversible thermodynamics", among engineers, continuum mechanicians, and statistical mechanicians.

"Thermodynamics appears to be a renascent science on the threshold of a new era."†

† Hatsopoulos and Keenan [2], p. *xlii*. (The *intent* of the frequent references to this work is not necessarily to indicate a preference for the methods of Hatsopoulos and Keenan over the Jaynes–Tribus approach, but to emphasize the existence of another approach which has great assets and potential.)

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NOTE ON THE TEMPERATURE PROFILE OF A LAMINAR WEDGE FLOW

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This note makes the point that if $n = \frac{1}{2}(3m - 1)$, then equation (167), p. 70, of Curle's book [1] has a particularly simple integral for $\theta(\eta)$ in terms of Falkner-skan function $f(\eta)$.

Falkner and Skan's relation of the momentum equation is

$$f''' + \tfrac{1}{2}(m + 1)\, ff'' + m(1 - f'^2) = 0.$$

Upon differentiating the above equation with respect to η, it becomes

$$f^{iv} + \tfrac{1}{2}(m + 1)\, ff''' - \frac{3m - 1}{2} f'f'' = 0.$$

It is easy to see that,

$$\theta(\eta) = 1 - \frac{f''(\eta)}{f''(0)}$$

is a solution of equation (167), if

$$n = \frac{3m - 1}{2}.$$

Same result could be obtained directly from the differential form of the momentum equation. Differentiating the boundary layer momentum equation with respect to y and with the aid of continuity equation, it is easy to see that $\partial u/\partial y$ and $T - T_1$ are analogous if and only if the wall temperature distribution is

$$T_w - T_1 = \frac{m+1}{2} f''(0)\, x^{(3m-1)/2}$$

and

$$\theta = 1 - \frac{f''(\eta)}{f''(0)}.$$

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