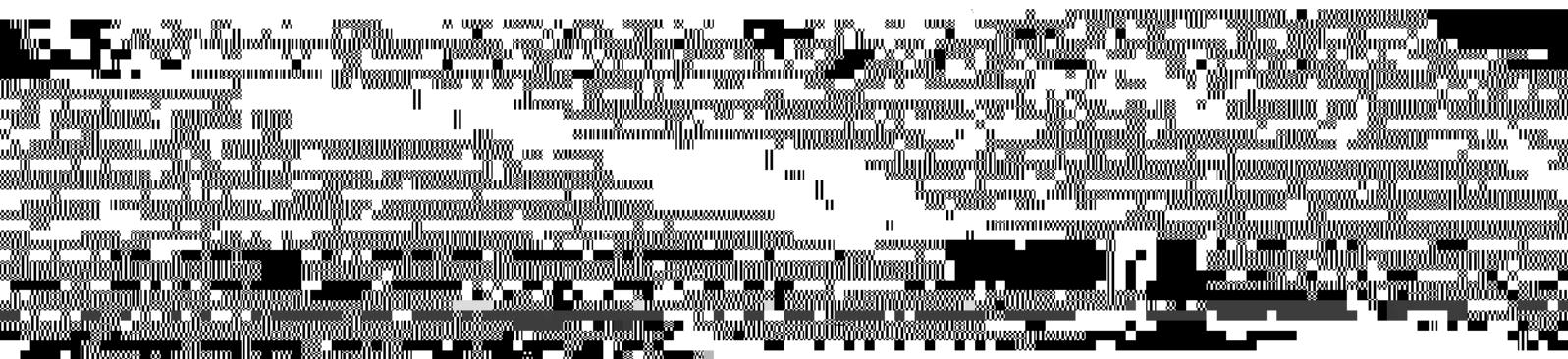


ICL, Italy



The time of incidence matches well, but
estimation of the fundamental difficulties until a higher order in ϵ .

of two nearly touching the same convergence of numerical calculations and are worth



the time of incidence matches well, but
estimation of the fundamental difficulties until a higher order in ϵ .

SOCIAL SECURITY DIVISION

for their production while maintaining consistency. Other -



the obvious extensions of the equations given in Lettre 1, and

Case 2. When $\lambda = 1$, they are solved, it is found that the pressure functions have asymptotic behavior for large r as follows.

$$P \propto R^{-4} + f(R^{\infty}), \quad P \approx R^{-2} + CR^{-3},$$

$$5418\lambda^2 - 453\lambda^2 + 566\lambda^3 - 65\lambda^4 \dots$$

$$140(1+\lambda)^3$$



Received 10 May 1973
Revised 17 July 1973

JOURNAL OF FLUID MECHANICS

TABLE I. Revised convergence properties of series for $X_{\alpha\beta}^M$. The columns compare the convergence of infinite series expansions that do not use the $\xi \ln \xi$ terms obtained here with ones that do. The improvement in the convergence with the number of terms n is clear.

	$M_{\alpha\beta}^N$		$M_{\alpha\beta}^M$	
	without terms	with $\xi \ln \xi$	without terms	with $\xi \ln \xi$
100	0.71927	0.71927	0.71680	0.71680
200	0.71858	0.71733	-0.14424	-0.14598
300	0.71815	0.71731	-0.14480	-0.14597
450	0.71805	0.71730	-0.14480	-0.14597

$$X_{\alpha\beta}^M = \frac{1}{205} \xi^{-1} + \frac{27}{200} \ln \xi^{-1} - 0.71715$$

$$+ \frac{353}{2800} \xi \ln \xi^{-1} + 0.07\xi, \quad (17)$$

$$X_{\alpha\beta}^M = \lambda \xi^{-1} + 27 \ln \xi^{-1} - 0.1460 \dots$$

$$+ \frac{493}{2800} \xi \ln \xi^{-1} + 0.15\xi, \quad (18)$$

where $\lambda = \epsilon$ when $\lambda = 1$. As further tests of the new results,

the convergences of Jeffrey and Sankaranarayanan⁸ and

were done again. Some results are shown in Table I,

can be seen that the convergence is improved using the

values.

$$411 - 652 \cdot 4 + 1832 \cdot 3 - 10414 \cdot 2 + 8823 \cdot 1 - 623$$

(17) $\epsilon = 10^{-10}$

at rest in an ambient rate-of-strain field,⁴ we expect the

series to converge.

REVIEW

5

We the coefficients, we
functions, but incor-
rected expressions for

D.J. Jeffrey and P. Sankaranarayanan

⁷R. M. Corless and D. J. Jeffrey, *J. Appl. Math. Phys.* **39**, 874 (1988).

⁸J. Happel and H. Brenner, *Low Reynolds Number Hydrodynamics* (Nijhoff, The Hague, The Netherlands, 1983).

⁹D. J. Jeffrey, *Utilitas Math.* (in press).

see that they were correct for the $X_{\alpha\beta}^M$ functions. The co-
efficients for the $X_{\alpha\beta}^M$ functions. The co-
 $\lambda = 1$ are