the correct acceleration in the rate of separation of these galaxies. However, we emphasize that the nearby galaxies can produce only extremely small tidal stresses within our galaxy, and these stresses are further reduced because the nearby galaxies are distributed in an approximately isotropic way. That is, contrary to the claims of Pachner,[2] general relativity implies no appreciable connection between the evolution of our solar system, and our galaxy, and the rest of the matter in the universe.

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[1]See, for example, C. Brans and R. H. Dicke, Phys. Rev. 124, 925 (1961).

[2]J. Pachner, Phys. Rev. 132, 1837 (1963); Phys. Rev. Letters 12, 117 (1964).

[3]F. Gürsey, Ann. Phys. (N.Y.) 24, 211 (1963).

[4]A. Einstein, Rev. Mod. Phys. 17, 120 (1945); 18, 148 (1946); earlier papers are listed in the second of these articles.

[5]T. Fulton, F. Rohrlich, and L. Witten, Rev. Mod. Phys. 34, 442 (1962).

[6]R. H. Dicke, Phys. Rev. 125, 2163 (1962).

[7]L. Landau and E. Lifshitz, The Classical Theory of Fields (Addison-Wesley Publishing Company, Inc., Reading, Massachusetts, 1951), pp. 304-312.

ERRATA

STATISTICAL BEHAVIOR OF FINITE ISOLATED SUPERFLUIDS. M. Rich and J. J. Griffin [Phys. Rev. Letters 11, 19 (1963)].

There is a typographical error in paragraph four, page 19: $g\hbar\omega = 15$ should read $g\hbar\omega = 35$.

DYNAMICAL INSTABILITY OF GASEOUS MASSES APPROACHING THE SCHWARZSCHILD LIMIT IN GENERAL RELATIVITY. S. Chandrasekhar [Phys. Rev. Letters 12, 114 (1964)].

Equation (13), expressing the Eulerian change in the pressure accompanying adiabatic radial pulsation, is incorrect. The correct expression is

$$\delta p = -\xi p_0' - \gamma p_0 e^{\nu_0/2}(r^2 \xi e^{-\nu_0/2})'/r^2. \qquad (13')$$

While this expression for δp can be justified by a detailed consideration of the second law of thermodynamics in the framework of general relativity, its validity is apparent when it is noted that Eq. (10) for the corresponding change in ϵ has the alternative form

$$\delta\epsilon = -\xi\epsilon_0' - (p_0+\epsilon_0)e^{\nu_0/2}(r^2\xi e^{-\nu_0/2})'/r^2; \qquad (10')$$

and the arguments in reference 4 of the Letter strictly apply to this equation.

Equation (12) together with Eq. (13′) constitute a characteristic value problem for σ^2. This problem is self-adjoint and the variational base is now provided by the equation

$$\sigma^2\int_0^R e^{(3\lambda_0-\nu_0)/2}(p_0+\epsilon_0)r^2\xi^2 dr = 4\int_0^R e^{(\lambda_0+\nu_0)/2} r p_0'\xi^2 dr + \int_0^R e^{(\lambda_0+3\nu_0)/2}\gamma p_0[(r^2\xi e^{-\nu_0/2})']^2 r^{-2} dr$$
$$+\kappa\int_0^R e^{(3\lambda_0+\nu_0)/2} p_0(p_0+\epsilon_0)r^2\xi^2 dr - \int_0^R e^{(\lambda_0+\nu_0)/2}\frac{(p_0')^2 r^2\xi^2}{(p_0+\epsilon_0)}dr. \qquad (15')$$

With the trial function $\xi = re^{\nu_0/2}$, Eq. (15′) gives

$$\sigma^2\int_0^R e^{(3\lambda_0+\nu_0)/2}(p_0+\epsilon_0)r^4 dr = \int_0^R e^{(\lambda_0+3\nu_0)/2}(4r^3 p_0' + 9\gamma p_0 r^2)dr$$
$$+\kappa\int_0^R e^{3(\lambda_0+\nu_0)/2} p_0(p_0+\epsilon_0)\, r^4 dr - \int_0^R dr e^{(\lambda_0+3\nu_0)/2} r^4 (p_0')^2/(p_0+\epsilon_0); \qquad (17')$$

this equation is of exactly the same form as Eq. (17) except that each integrand has an additional factor $e^{\nu_0/2}$.

The application of Eq. (17′) to determining the critical γ's which limit the stability of the compressible homogeneous sphere in general relativity leads to the results in the accompanying table; this new table replaces Table I of the Letter. It will be observed that the numerical results are substantially the same; the various conclusions reached originally are clearly unaffected. It is, however, of interest to note that the asymptotic relation Eq. (22) now takes the form

$$R_*/R_0 \to 19/[42(\gamma - 4/3)] \quad (\gamma \to 4/3). \tag{22'}$$

I may take this occasion to say that Eq. (15′) has been used to determine the stability of a variety of configurations in which general relativity is expected to play a role. In all cases dynamical instability sets in long before the Schwarzschild limit is reached; and this is true also of superdense objects such as "neutron stars."

Table I′. The critical values of the ratio of the specific heats which limit the stability of the compressible homogeneous sphere in general relativity: R_* (given in the unit $R_0 = 2GM/c^2$) is the minimum radius, for a given mass, compatible with stability for $\gamma < \gamma_c$.

$\sin^{-1}(R/r_0)$	γ_c	R_*/R_0
0	1.3333	∞
20°	1.3938	8.549
30°	1.4879	4.000
40°	1.6704	2.420
45°	1.8257	2.000
50°	2.0627	1.704
55°	2.4520	1.490
60°	3.1652	1.333
65°	4.7146	1.217
70.529°	∞	1.125