

The Flatness Problem and the Pulsating Universe.

F. R. TANGHERLINI

Department of Physics, College of the Holy Cross - Worcester, MA 01610, USA

(*Nuovo Cimento B*, **108** (1993) 1253)

PACS 04.20.Cv – Fundamental problems and general formalism.

PACS 98.80.Dr – Theoretical cosmology.

PACS 99.10 – Errata.

On p. 1255, second paragraph, line 2, for eq. (3), read eq. (2); on line 3, for eq. (4), read eq. (3); on the last line of the page, for eq. (3), read eq. (2).

On p. 1263, following eq. (57) for $\xi = (1 - \cos \phi)$ read $\xi = (1 - \varepsilon \cos \phi)$, and in eq. (58), after the integral sign, for $(1 - \cos \phi)$, read $(1 - \varepsilon \cos \phi)$.

Light Travel Times around a Closed Universe.

F. R. TANGHERLINI

Department of Physics, College of the Holy Cross - Worcester, MA 01610, USA

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On p. 932, eq. (1), for $ds^2 = c^2 dt^2 - a_e^2 (d\theta_1^2 + \sin^2 \theta_1)(d\theta_2^2 + \sin^2 \theta_2 d\theta_3^2)$, read $ds^2 = c^2 dt^2 - a_e^2 [d\theta_1^2 + \sin^2 \theta_1 (d\theta_2^2 + \sin^2 \theta_2 d\theta_3^2)]$.

Also, in both these papers, as well as in the one that preceded them (*Nuovo Cimento B*, **108** (1993) 911), the energy-stress tensor $T^\mu_\nu(A^2)$ was interpreted as being associated with a gas of «free particles» in negative-energy states. I no longer believe this interpretation to be valid, and that rather the tensor is most likely associated with a band of *filled* negative-energy states at the top of the Dirac sea which are not shielded for their gravitational effects in the field equations. A paper discussing this revised interpretation is in preparation. Also, the discussion of the solution for the expansion parameter for the case $A^2 = 0$, $B^2 > 0$ exhibits heretofore unnoticed anomalous behavior in the neighborhood of $t = 0$, and a detailed analysis is needed and will be given in a forthcoming paper.