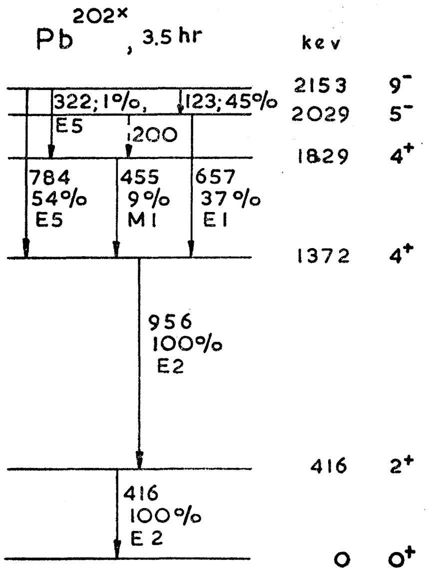

FIG. 1. Proposed decay scheme of $Pb^{202*}$ (energy values in kev).

with the strong $M$ conversion line of the 123-kev $\gamma$ ray, and the $L$ conversion line with the 196-kev conversion line of $Pb^{203}$, which was also present in the sample; in the scintillation spectrum the 277-kev $Pb^{203}$ $\gamma$ ray and the backscattering peak hinder the detection of this $\gamma$ ray.

A more extensive report will be published in Physica. We thank Dr. C. J. Bakker and Dr. A. H. W. Aten, Jr., for their interest, R. H. Nussbaum, G. J. Nijgh, and L. T. M. Ornstein for help with the measurements, Mrs. T. de Vries-Hamerling for performing the chemical separations, and the Foundation for Fundamental Research of Matter (F.O.M.) of the Organization for Pure Scientific Research (Z.W.O.) for their support.

TABLE I. $\gamma$ rays in $Pb^{202*}$.

| Energy (kev) | Assignment | Intensity |
|---|---|---|
| x$_K$ | — | ~15 |
| 123±2 | $E3,4$ | 45 |
| 322±4 | $E5$ | 1.2 |
| 416±3 | $E2$ | 102 |
| 455±4 | $M1(+E2?)$ | 9 |
| 657±5 | $E1$ | 40 |
| 784±4 | $E5$ | 54 |
| 957±5 | $E2$ | 98 |

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* On leave from the Eidgenossische Technische Hochschule in Zürich, Switzerland.

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# Errata

**Interpretation of Electron Scattering Experiments,** L. I. SCHIFF [Phys. Rev. **92**, 988 (1953)]. The last sentence at the end of the first paragraph: "This effect was noted earlier by M. Goldhaber and A. W. Sunyar [Phys. Rev. **83**, 906 (1951)]" should have been placed at the end of footnote 3B.

**Neutron Capture $\gamma$ Rays from Scandium, Vanadium, Manganese, Cobalt, and Copper,** G. A. BARTHOLOMEW AND B. B. KINSEY [Phys. Rev. **89**, 386 (1953)]. Because of a regrettable oversight, the intensities for the vanadium $\gamma$ rays given in Tables II and III of this paper are too large by a factor of 1.56. However, this error does not apply to Fig. 4. We are indebted to Dr. P. S. Mittelman for drawing our attention to this point.

**Effects of the Atmosphere on the Penetrating Cosmic Radiation,** ROBERT L. CHASSON [Phys. Rev. **89**, 1255 (1953)]. In Table I, the signs of the temperature coefficients of Duperier and Chasson should be + rather than −.

**The Energy Loss of a Fast Charged Particle by Čerenkov Radiation,** R. M. STERNHEIMER [Phys. Rev. **91**, 256 (1953)]. In this paper a dimensionless quantity $b_p$ was defined as $b/(c/\nu_p)$, where $b$ is the impact parameter. This definition should be $b/(c/2\pi\nu_p)$. All of the equations are unaffected, in particular Eqs. (1), (35), and (36) for the Čerenkov loss $W_b$. However, Eq. (24) for $\kappa_p$ gives the absorption coefficient for a length $c/2\pi\nu_p$ instead of $c/\nu_p$. The numerical values of $b_p$ for the examples considered are increased by a factor $2\pi$. As a result $W_b$ is smaller than the values given in the paper. The case of emulsion [also reported in Phys. Rev. **89**, 1148 (1953)] was recalculated using $b_p=31.4$. This gives $W_b(\infty)\cong 0.4\times 10^{-3}$ Mev/g cm$^{-2}$. The values of $W_b$ for gases given in Table II should be decreased by $\frac{2}{3}Af_j \ln(2\pi)$, which is 0.104 Mev/g cm$^{-2}$ for $H_2$, 0.052 Mev/g cm$^{-2}$ for He, and 0.0135 Mev/g cm$^{-2}$ for $O_2$ (model II). The resulting values of $W_b(\infty)$ (in Mev/g cm$^{-2}$) are 0.128 for $H_2$, 0.088 for He, and 0.0165 for $O_2$. $W_b(\infty)$ for Xe becomes 0.058 Mev/g cm$^{-2}$. Figure 1 for the Čerenkov loss $J$ in emulsion pertains to $b=0.02\mu$ (instead of $0.13\mu$) and Fig. 3 pertains to $b=0.013$ cm (instead of 0.081 cm).

In the second line below Eq. (6), $\nu_{18}$ should be $\nu_{14}$.

**A Precision Measurement at 24 500 Volts of the Conversion Constant λv,** GAELEN L. FELT, JOHN N. HARRIS, AND JESSE W. M. DUMOND [Phys. Rev. **92**, 1160 (1953)]. The title should read: "A Precision Measurement at 24 500 Volts of the Conversion Constant $\lambda V$."

**The Scattering of Fast Neutrons by Iron, Lead, and Chromium,** M. A. ROTHMAN, D. W. KENT, AND C. E. MANDEVILLE [Phys. Rev. **92**, 1097 (1953)]. The word "unresolved" on the next to the last line of Abstract P6 should read "resolved."

**Effect of Traps on Carrier Injection in Semiconductors,** H. Y. FAN [Phys. Rev. **92**, 1424 (1953)]. The factor $\tau_g$ appearing in the last section on the drift of injected carriers should be $\tau_f$. The term $dn_t/dt$ in Eqs. (18) and (26) should be replaced by $(R_{vt}-R_{tv})$, if the electron transitions between the traps and the conduction band were to be taken into account. In that case, the coefficient of $\Delta n_t$ in (21) and the coefficient of $\Delta p$ in (27) will become $[(1/\tau_f\tau_r)+(1/\tau_c\tau_t)]$ instead of $(1/\tau_f\tau_r)$, where $1/\tau_c=r_c(n_0+n_1)$.

**A Binding Energy Calculation on $He^4$ with Single-Particle Wave Functions,** P. G. WAKELY [Phys. Rev. **90**, 724 (1953)]. The third square bracket in the wave function $\Psi_2$ should read $[\sqrt{\tfrac{1}{2}}\Phi(sp[2]^{13}P,sp[2]^{13}P,{}^{11}S)-\sqrt{\tfrac{1}{2}}\Phi(sp[2]^{31}P,sp[2]^{31}P,{}^{11}S)]$. The state referred to earlier as $(9s)^2(2p)^2[4]^{11}S$ should of course be $(1s)^2(2p)^2[4]^{11}S$.

**Multiple Production of Pions in Nucleon-Nucleon Collisions at Cosmotron Energies,** E. FERMI [Phys. Rev. **92**, 452 (1953)]. In computing the statistical weights of the various states discussed in this paper, a factor $1/n!$ ($n$ = number of pions) was omitted. For this reason, the statistical weights given in column 2 of Table II and in columns 2 and 3 of Table III should be divided by the factorials of the number of pions given in column 3 of Table II and column 4 of Table III. Corresponding changes should be made in the computed probabilities for the two cases. This correction has the effect of reducing the probability of events with high multiplicity. For example, for a neutron-proton collision, the probabilities of stars with 1, 3,