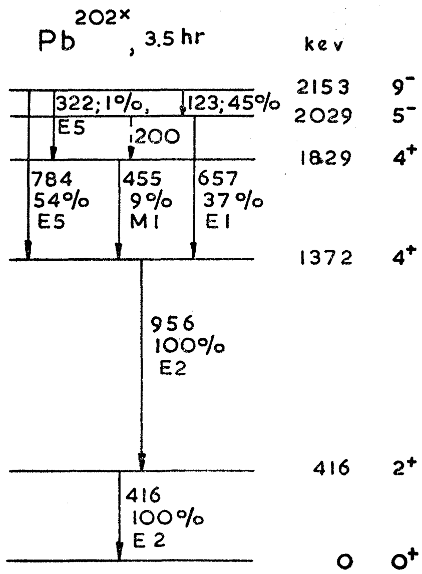

FIG. 1. Proposed decay scheme of Pb^{202*} (energy values in kev).

with the strong M conversion line of the 123-kev γ 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} γ ray and the backscattering peak hinder the detection of this γ 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,

TABLE I. γ rays in Pb^{202*}.

Energy (kev)	Assignment	Intensity
xK	—	~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

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.

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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 γ 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 γ 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 κ_p gives the absorption coefficient for a length $c/2\pi\nu_p$ instead of c/ν_p. The numerical values of b_p for the examples considered are increased by a factor 2π. 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 $W_b(\infty)\cong0.4\times10^{-3}$ 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 0.13μ) and Fig. 3 pertains to $b=0.013$ cm (instead of 0.081 cm).

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

A Precision Measurement at 24 500 Volts of the Conversion Constant $\lambda\nu$, 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 λV."

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 τ_g appearing in the last section on the drift of injected carriers should be τ_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 Δn_t in (21) and the coefficient of Δp 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 Ψ_2 should read $[\sqrt{\frac{1}{2}}\Phi(sp[2]^{13}P,sp[2]^{13}P,{}^{11}S)-\sqrt{\frac{1}{2}}\Phi(sp[2]^{31}P,sp[2]^{31}P,{}^{11}S)]$. 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, or 5 prongs for 1.75-Bev bombarding energy become 68, 32, and 0.13 percent; for bombarding energy of 2.2 Bev, the probabilities are 62, 38, and 0.3 percent. For 3-pronged stars the probabilities of a star containing a single negative pion, or at least a negative and a neutral pion, or at least a positive and a negative pion, for bombarding energy of 1.75-Bev energy are 61, 11, and 28 percent; and for 2.2-Bev bombarding energy 47, 14, and 39 percent.

In this computation the possibility of deuteron formation by proton-neutron binding, as well as the elastic shadow scattering have been neglected.

Production of Polarized Particles in Nuclear Reactions, A. Simon and T. A. Welton [Phys. Rev. **90**, 1036 (1953)] and **Theory of Polarized Particles and Gamma Rays in Nuclear Reactions,** Albert Simon [Phys. Rev. **92**, 1050 (1953)]. In these two papers (hereafter referred to as I and II, respectively), the operators T_κ^q were assumed to be tensor operators defined by the commutation relations given by Racah[1] and were normalized by the requirement that $T_0^q = P_q \times([i_z/i(i+1)]^{\frac{1}{2}})$. Innes[2] has kindly pointed out that the normalization of the operators T_κ^q cannot be correct for $q>2$ since for these cases the matrix element[3] $(ii|T_0^q|ii)$ has nonzero values for $2i<q$ and hence the operator will not be irreducible. The difficulty appears to lie in the circumstance that the commutation relations of Racah[1] are a necessary but not a sufficient condition for the irreducibility of the tensor operators. In our papers the operator T_κ^q was assumed to transform irreducibly and the only use of the definition of T_0^q was in normalizing the final result. Hence all general results such as angular dependences, selection rules, etc., are correct and all that must be changed is the coefficient preceding the summation symbol in several of the equations.

A suitable normalization of the tensor operators may be obtained by defining

$$T_0^q = \Sigma_m (iqm0|iqim)\chi_m^i \chi_m^{i*}, \tag{1}$$

where χ_m^i is a state vector of spin i and z component m. This operator is irreducible by construction. It is identical to the previous operator for $q=0$ and 1 and differs only by the constant factor $[4i(i+1)/[(2i-1)(2i+3)]]^{\frac{1}{2}}$ for $q=2$. Since all special cases discussed in the papers involve $q\leq 2$, all results for these cases will still be correct with the understanding that T_0^2 is as defined previously.

Equations involving the general operator T_κ^q will have a changed coefficient which is easily found by the use of Eq. (1) and the procedure of Appendix A of I. The reduced matrix element of T_κ^q is now $(2i+1)^{\frac{1}{2}}$ rather than $[(2i-q)!(2i+q+1)!]^{\frac{1}{2}}P_q([i/(i+1)]^{\frac{1}{2}})/(2i)!$ Hence the coefficient of Eq. (6.3) of I becomes $(\pi)^{\frac{1}{2}}\lambda_\alpha^2(2i+1)^{\frac{1}{2}}/[2(2I+1)(2i+1)]$ rather than the more complicated expression given previously. The new coefficient of Eq. (3.2) of II is

$$\lambda_\alpha^2[(2i'+1)(2q+1)]^{\frac{1}{2}}/\{4(2I+1)[(2i+1)(2q+1)]^{\frac{1}{2}}\}.$$

The correction for the remaining equations is similar.

We wish to take this opportunity to thank Dr. Innes for calling our attention to this point.

[1] G. Racah, Phys. Rev. **62**, 442 (1942).
[2] F. R. Innes (private communication).
[3] See Appendix A of I.

Total Cross Section for Positive Pions in Hydrogen, Stanley L. Leonard and Donald H. Stork [Phys. Rev. **93**, 568 (1954)]. In the issue, the word "Pions" in the title appeared incorrectly as "Ions."