Begin
#
688
The Rostovskiy sovnarkhoz (Rostov Sovnarkhoz) has played an eminent role in developing the scientific work of the Rostov Institute of RR Engineers. The institute already has established permanent cooperation with the Novocherkasskii elektrovozstroiteli'nyy zavod imeni Budennogo (Novocherkassk Electric Locomotive Plant imeni Budenyy), the Rostovenergo, 'e Kamenskaya TETs, the Nesevaty GRES and other Sovnarkhoz enterprises. The Sovnarkhoz also helps the institute by periodically examining and approving plans for the scientific work to be done by the enterprises of the district, by financing the agreement work, by placing at the institute's disposal facilities for experiments, etc. Last year, Doctor of Technical Science D.E. Karminskiy of the Chair for Designing and Repair of Locomotives solved the problem of the adaptation of locomotives to the curvature of a railway section. These results were at once applied in the building of new Soviet electric locomotives, thus improving their dynamic proper-
Research is Conducted According to a Joint Plan

Docent A.I. Zelenov as an example. He also mentions the names of Docents Kh.N. Dement'yev and L.F. Bykadorov who are working on problems for enterprises other than the Rostov Sovnarkhoz. In conclusion the author speaks of plans for future cooperation with the enterprises which provide for a number of conferences.

ASSOCIATION: Rostovskiy institut inzhenerov zheleznodorozhnogo transporta (Rostov Institute of RR Engineers).
Zelenov, Aleksandr Ivanovich, dott.sen., kand. tekhn. nauk; Tereshnyov, F.O.,
retsezent; Shcherbakov, I.V., red.; Abramova, Ye.A., tekhn. red.

[Welding and surfacing of cast-iron parts] Svarka i naplavka
115 p.

1. Rostovskiy institut inzhenerov shleznozaborchnogo transporta
(for Zelenov).

(Gast iron—Welding) (Hard facing)
KRIVORUCHKO, Nikolay Zakharovich, kand. tekhn. nauk; SLUSHAYENKO, A.M.,
dotsent, retsenz.; YELISEYEV, F.G., dota., retsenz.; LERNER, K.S.,
dots., retsenz.; GLUKHOV, V.A., dota., retsenz.; KITANOV, P.I.,
dots., retsenz.; TSIBIDANOV, V.M., inzh., retsenz.; DOROFEYEV,
ingh., retsenz.; KALEDENKOV, S.S., inzh., retsenz.; KOCHEROV,
V.C., inzh., retsenz.; KALEDENKOV, S.S., inzh., retsenz.; KOROLEV,
A.N., inzh., retsenz.; LOKSHIN, Kh.A., inzh., retsenz.; FISCHER,
ingh., retsenz.; SHAKURSKII, K.A., inzh., retsenz.; UTKIN,
A.V., tekhn., retsenz.; VALETOV, A.I., inzh., red.; BOBROVA, Ye.N.,
tekhn. red.

[Operation, management, and repair of rolling stock] Vagonnoe kho-
ziaistvo. Moskva, Vsos.izdatel'sko-poligr.obedinienie M-va putei
soobshcheniia, 1961. 319 p. (MIRA 14:11)

1. Kafedra "Konstruktziya, remont i ekspluatatsiya wagonov" Rostov-
skogo instituta inzhenerov zheleznodorozhnogo transporta (for all
except Valetov, Bobrova).

(Railroads—Rolling stock)
Physical culture for the masses. Sov. professiya 5 no. 6: 15-1
Je '57.

1. Zavednyushchy otdelom fiskultury i sportsa Weissyusnogo
TSentral'nogo Soveta professional'nykh soyuзов.
(Physical education and training)
YELESEYEV, G.

For new progress in the physical education movement, Soy. profsoiuzy
7 no. 7:24-27 Apr '59, (MIRA 12:7)

Zaveduyushchiy otdelom fiskul'tury i sporta Vsesoyuznogo
tsentral'nogo soveta profsoiuzov.  
(Physical education and training)
YELISHEV, G.

Brilliant triumph of Soviet sports. Sov. profsoiuzy 16 no.19:23-26 0 '60.
(MIRA 13:10)

1. Zaveduyuchchiy otdelem fiskul'tury i sporta Vsesoyuznogo tsentral'nogo soveta profsoyuzov.
(Sports) (Rome--Olympic games)
Suggested, achieved, introduced. Izobr. i rats. no.1:18-49
Ja '60. (MIRA 14:12)

1. Glavnuy inzhener Leningradskoy mebel'noy fabriki No.7 (for
Koryakovtsev).
(Technological innovations)
The text on the page appears to be a continuation of a scientific discussion, possibly from a conference or a report, but the content is not fully legible due to the quality of the image. It seems to be discussing experimental results or findings, possibly related to nuclear physics, given the context of "nuclear" and "plasma" mentioned. The text is technical and specialized, typical of scientific communications. Without clearer visibility, it's challenging to extract specific details or the full scope of the discussion. However, it appears to be a detailed exposition on some aspect of nuclear physics or plasma physics, possibly involving experimental setups or observations.
AUTHOR: Yeliseyev, G. F.; Moiseyev, I. G.

TITLE: Certain properties of regions with proton and nonproton flares

SOURCE: Ref. Zh. Astronomiya, Abs. 6, 51, 366


TOPIC TAGS: solar flare, solar radiation, solar activity, sunspot

ABSTRACT: An attempt is made to find the properties of radiation emanating from the active regions of the Sun which contain proton flares. It was shown that in these regions the outbursts of radiation in the centimeter band are on the average 3-4 times greater than in the regions without proton flares. A shift of the center of condensation (at wavelength of 21 cm) to the east of the sunspots with maximum magnetic fields was noted for regions of both types. The shift above the regions with proton flares however was smaller than the shift above regions without the proton flares. The intensities of the slowly varying components of the radiation practically do not differ when measured at 9 and 21 cm wavelengths. [Translation of summary]
AUTHOR: Yeliseyev, G. F.; Moiseyev, I. G.

TITLE: Some properties of regions with proton and nonproton flares

SOURCE: Ref. zh. Fizika, Abs. 42h401

REF SOURCE: Izv. Krymsk. astrofiz. observ., v. 34, 1965, 3-8

TOPIC TAGS: solar flare, solar radio emission, proton, solar astronomy, sunspot

ABSTRACT: An attempt is made to find the distinguishing features of radio emission from active regions with proton flares. It is shown that in such regions the number of flares, accompanied by bursts of radio emission at centimeter wavelengths, is on the average 3-4 times larger than in regions without proton flares. For regions of both types, an eastward shift of the centers of condensation (at 21 cm wavelength) is observed relative to spots with the largest magnetic field in the group, but the shift turned out to be smaller over the regions with proton flares than over the regions without proton flares. The regions are practically identical with respect to the intensity of the slowly varying component of radio emission at wavelengths 9 and 21 cm. [Translation of abstract]

SUB CODE: 03, 20
"The PSM-1000 Multistation Welding Converter,"
G. G. Yeliseyev, Engr, 1 1/2 PP

"Avtogen Delo" No 11

Converter weighing 1700 kg is described as compact, easy to install and transport. It includes type SD-1000, 60-kw generator, VDE-75-4 three-phase 75-kw induction motor, and control rheostats.
YELISEYEV, O.G., inzhener.

Efficient design of bearing units for unit-frame rotary converters with speeds of 3,000 rpm. Vest.elektroprom.27 no.1:62-63 Ja '56. (MIRA 9:6)

1.Zavod "Elektrik" Ministerstva elektropromyshlennosti. (Bearings (Machinery))
USSR:

- Eliseev, G. I.

Matter spectra of cosmic radiation at the sea level. A. I. (unpublished)


A. P. Kudinov
USSR/Nuclear Physics - Cosmic Rays  Sep 51

"Investigation of Mass Spectrum of Cosmic Ray Particles at Sea Level," A. I. Alikhanov, G. P. Yeliseyev

"Zhur Eksper i Teoret Fiz" Vol XXI, No 9, pp 1009-1022

Describes a new much improved mass spectrometer for cosmic rays, which increases reliability of trajectory detn and mass measurement. It was applied to measurements of mass spectra of cosmic ray particles at sea level. Submitted 3 Mar 51.

LC  193791
ON THE MASS SPECTRA OF CORING RAY PARTICLES AT
SEA LEVEL. A. L. Al'tshuler and G. P. Il'ichev, Eds.
Energiya, Moscow, 1972, No. 1, 364-365. (In Russian)

A magnetic mass spectrometer is described. The particle
movement is fixed by five successive layers of counters and
the particle is brought to rest by laminar absorbers. The
apparatus allows resolution of the $\pi$ and $\mu$ spectra. Meas-
urements show masses intermediate between $\pi$ and $\mu$ proton
masses and a few masses greater than the latter. (Abstract)

Abstract

LYUBIMOV, V.A.; YELISHETSKY, G.P.; KOSMACHEVSKY, V.K.

Investigation of cosmic rays at sea level with the aid of the mass-spectrometer by measuring the impulse and ionizing capacity of individual particles. Izv. AN SSSR, Ser. fiz. 19 no. 6: 720-731 N-D '55. (MLRA 9:4)

1. Akademiya nauk SSSR.
   (Cosmic rays) (Nuclear physics)
ALIKHANOV, A.I.; YKHISEYEV, O.P.

Anomalous scattering of \( \gamma \)-mesons in graphite. Izv.Ak. SSSR Ser.fit.
19 no.6:732-736 N-D '55. (MLA 9:4)

1.Akademiya nauk SSSR.
(Cosmic rays) (Nuclear physics)
LYUBIMOV, V.A.; YELISBEYV, G.P.; KOSMACHEVSKIY, V.K.; KOVIDA, A.V.

Pulse dependence of the probability of ionization induced by \( \pi \)-mesons. Izv. AN SSSR, Ser. Fiz., 19, no. 6: 753-757, N-D '55.

1. Akademiya nauk SSR.
   (Cosmic rays) (Nuclear physics)
Probable ionization of $\gamma^-$-mesons in p.s. in the impulse range between $10^8$ and $1.2 \times 10^9$ cm/sec.

Abstract: Experiments with relativistic $\gamma^-$-mesons are described. The experiments were conducted for the purpose of ascertaining the effect of the velocities of $\gamma^-$-mesons (of the energy range between $4 \times 10^8$ to $1.2 \times 10^9$ cm/sec) on their ionizing characteristics. The experiments were conducted with the help of a 4-layer proportional counter and of a modern mass-spectrograph.

Institution: ...

YELISEYEV, G. P.

USSR/Physics - Cosmic radiation

Card 1/1 Pub. 22 - 14/19

<table>
<thead>
<tr>
<th>Authors</th>
<th>J.ubin, V. A.; Eliseev, O. P.; and Koszachevskiy, V. K.</th>
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<tbody>
<tr>
<td>Title</td>
<td>Measuring the masses by impulse and ionization and the spectra of the impulses of various particles of cosmic radiation at sea level</td>
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<tr>
<td>Periodical</td>
<td>Dok. AN SSSR 102/1, 57-60, May 1, 1955</td>
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<tr>
<td>Abstract</td>
<td>A new method for measuring the masses of particles of cosmic radiation is described. Basically, the new method consists of measuring impulses of ionization produced by a cosmic radiation particle in the free mass of the 4-layer proportional counter inserted between the magnetic poles of the instrument. The complete spectra of nucleons-active particles were constructed with the help of this new method. Three USSR references (1951-1954). Tables; diagrams.</td>
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<td>Institution</td>
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<tr>
<td>Presented by</td>
<td>Academician A. I. Alikhanov, January 28, 1955</td>
</tr>
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</table>
**ELISEEV, G. F.**

**USSR/Physics - $\pi$ - mesons**

<table>
<thead>
<tr>
<th>Card 1/1</th>
<th>Pub. 22 - 1750</th>
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</table>

**Authors**: Lyubimov, V. A.; Eliseev, G. F.; and Kosmachovskiy, V. K.

**Title**: Spectra of the $\pi$-Mesons under lead filters of various thicknesses at sea level

**Periodical**: Dok. AN SSSR 102/2, 249-251, May 11, 1955

**Abstract**: Experiments with $\pi$-mesons, conducted with the help of a spectrograph equipped with a 4-layer proportional counter, are described. The experiments were conducted to obtain $\pi$-meson spectra measuring the ionization and pulses of nuclear stops in the catching filters for which 2, 5, 10 and 40 cm lead films were used. Five references: 1 French and 4 USSR (1952-1955). Graphs.

**Institution**: ..........

**Presented by**: Academician A. I. Alikhanov, January 28, 1955
Title: Spectrum of Primary Ionization of Rapid Mu-Mesons

Abstract: With the aid of 2 10-layer low-efficiency counters, filled with a mixture of neon and commercial propane, investigation was made of the primary ionization of mu-mesons with momenta in the range $2 \times 10^8$ -- $3.4 \times 10^{10}$ ev/sec. A total of 1,779 mu-mesons were recorded. All particles were broken up by momenta into 10 groups, for each of which the average momentum and ionization were determined. The results of the measurements agree qualitatively with the theoretically predicted logarithmic increase in the primary ionization and confirm the saturation of the primary ionization for mu-mesons with momenta greater than $10^{10}$ ev/sec, due to the effect of polarization of the medium. The method of processing the experimental data on the primary ionization used by the authors is described.
"Measurement of Longitudinal Polarization of Electrons."

Paper submitted at the A-U Conf. on Nuclear Reactions in Medium and Low Energy Physics, Moscow, 19-27 Nov 57.
The Polarization of Electrons on the Occasion of $\beta$-Decay.

(Polyarizatsiya elektronov pri $\beta$-rampade - Russian)


(U.S.S. R.)

In connection with the checking of the law of conservation of parity, the authors carried out experiments concerning the discovery of a longitudinal polarization of electrons on the occasion of $\beta$-decay. For the determination of this polarization the effect of the azimuthal asymmetry was used; it occurs on the occasion of the simple scattering of electrons polarized vertical to the direction of motion through a large angle on a thin foil of a heavy element. The longitudinally polarized $\beta$-electrons were sent through an electric field crossed by a magnetic field. In these crossed fields a transversal polarization occurred in the electrons. The reasons why this method should be favored are given. The numerical parameters of the measuring device used here are given. Measurements were carried out in the energy domains of 300 keV. At an electric field strength of 10,3 keV/cm and a magnetic field strength of $H = 79$ Oe, the spins were turned by the angle of $\varphi \sim 50^\circ$. The expected amount of the azimuthal asymmetry can be determined from the data given in a table. For the expected effect of azimuthal asymmetry in the plane which is vertical to the direction of spin the value $\delta_{\exp} = 27.7^\circ$ is found.
The Polarization of Electrons on the Occasion of $\beta$-Decay.

Measuring results are given in a further table. They show that there is no asymmetry in the plane of the turn of the spin by 0° - 180°. An asymmetry is observed in the plane 90° - 270°, where the sign changes if the direction of the field is reversed. The sign of asymmetry is determined by the fact that on the occasion of $\beta$-decay the electrons are emitted with a spin directed against the motion of the electrons. For the degree of the polarization of the electrons on the occasion of $\beta$-decay the expression $\beta(17.4\pm2.6)/27.7 = (0.63\pm0.09)\beta$ is found. The experiments concerning the measurement of the polarization of electrons in the case of $\beta$-decay tend to show that parity is not conserved in the case of weak interaction and that the theory of the two-component neutrino suggested by Landau agrees with the experiment.

(4 tables).
"Polarization of Electrons Emitted in $\beta$-Decay,"

USSR Acad. Sci., Moscow

Abst: In connection with a reconsideration of the law of conservation of parity some experiments have been performed with the purpose of detecting longitudinal polarization of electrons emitted in $\beta$-decay. It was found that the spin of the emerging $\beta$-electrons is opposite to the direction of electron motion. The magnitude of the longitudinal polarization agrees with the theoretical value, $v/c$, $v$ being the electron velocity.
ALIKHANOV, A. I., YELEŞEYEV, G. P. and LYUBIMOV, V. A.

"Measurement of Longitudinal Polarization of Electrons Emitted in ⁵⁻ Decay"

USSR Academy of Sciences, Moscow.

Abstract: The Longitudinal Polarization of Coulomb - transition electrons has been measured for several electron energies. The polarization value was found to be equal to v/c for all the substances measured. It is proved that the most probable relationships among the coupling constants in -decay are

\[ C = -C'\text{m} \quad C_b = \gamma C_v \quad C_a \neq C'a. \]
AUTHORS: Alikhanov, A.I., Yeliseyev, G.P., Lyubimov, V.A., Ershler, B.V.

TITLE: Electron Polarization in β-Decay (Polarizatsiya elektronov pri β-raspade)

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1958, Vol. 34, № 4, pp. 785 - 799 (USSR)

ABSTRACT: The authors reported already in a short communication (reference 1) on experiments in which a longitudinal polarization of the β-electron was found. This work now describes more exactly these experiments and control measurements. The experimental arrangement consisted of a device for measuring the turning of the spin and of a device for the measurement of the intensity of the electrons, which were scattered through a wide angle, at various azimuthal angles between 0 and 360°. The apparatus for the turning of the spin consisted of an oblong electric capacitor which was in a metal vacuum tube. Then the authors shortly report on the accuracy of the measurement of the electric and of the magnetic
Electron Polarization in $\beta$-Decay

56-34-4-1/60

field. The source of the $\beta$-electrons was laid upon a 10$\mu$m thick aluminium support as an even spot with a diameter of 1 cm. The source consisted of segregations from fraction solutions (oskolochnyy rastvor) of $\text{Sr}^{90}$ with an admixture of $\text{Sr}^{89}$. The spectrum of the electron energies of such a source is plotted in a diagram. The thickness of the source plays an essential role in such measurements. That part of the device in which there were the scatterer of the electrons and the counters was separated from the capacitor by a thin colloidal film. For the computation of the expected effect of the azimuthal asymmetry the angle of rotation of the electron spin in crossed fields and the dependence of the azimuthal asymmetry on the scattering angle and on the energy of the polarized electrons must be known. A quite complicated term for $\sin \varphi$ is obtained, where $\varphi$ means the angle of rotation of the spin. The amount of $\sin \varphi$ depends to quite a degree on the energy of the electron and this especially in the case of high energies. 3 tables illustrate the experimental results for 3 series of measurements at energies of $\sim$300 keV and a fourth table.
Electron Polarization in $\beta$-Decay

56-34-4-1/60

gives the results for energies of $\sim 750$ keV. Various details are discussed. An asymmetry in the direction $0 - 180^\circ$ exists that changes its sign in the case of a change of the signs of the fields. Their mean value is $(14.5 \pm 8.5)\%$. In the direction $90 - 270^\circ$ the asymmetry is $(42.0 \pm 4.8)\%$. The data obtained on the polarization need a correction because of the multiple scattering at the scattering foils. The degree of polarization has at a mean energy of $300$ keV resp. $750$ keV with an accuracy of $15\%$ resp. $40\%$ the value $-\nu/c$. Finally the authors thank K.A. Ter-Martirosyan for the derivation of the formula of the spin rotation in the crossed fields; L. Ya. Suvorov, M. P. Anikina, and V. D. Laptev for the production of the strontium source; A. S. Kronrod for the computation of the light intensity of the device and M. Ya. Vishnovskiy for his useful data on the role of multiple scattering. There are 4 figures, 7 tables, and 12 references, 6 of which are Soviet.
AUTHORS: Alikhanov, I. I., Yelistratov, G. G., Lyubimov, V. A.

TITLE: The Measurement of the Longitudinal Polarization of the Electrons Emitted in β-Decay of Tm\(^{170}\), Lu\(^{177}\), Au\(^{198}\), Sm\(^{153}\), Ra\(^{186}\), Sr\(^{90}\) and Y\(^{90}\). II (Измерение продольной поляризации электронов, испускаемых при β-распаде Tm\(^{170}\), Lu\(^{177}\), Au\(^{198}\), Sm\(^{153}\), Ra\(^{186}\), Sr\(^{90}\) и Y\(^{90}\). II)

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoj fiziki, 1958, Vol. 34, Nr 5, pp. 1045-1057 (USSR)

ABSTRACT: The authors try to measure, as precisely as possible, the longitudinal polarization of electrons with various energies for elements with Coulomb (Kulon) transitions, such as Tm\(^{170}\) (J = 1; yes), Ra\(^{186}\) (J = 1; yes), Sm\(^{153}\) (J = 1,0; yes), Au\(^{198}\) (J = 0; yes) and Lu\(^{177}\) (J = 1; yes) or (J = 0; yes). These elements contain a mixture of Gamow (Gamov)-Teller interactions and Fermi interactions. For the purpose of comparison, the authors also carried out measurements at Sr\(^{90}\) and Y\(^{90}\), which have "unical" transitions and a pure Gamow (Gamov)-Teller interaction. The longitudinal polariza-
The measurement of the longitudinal polarization of the electrons emitted in β-decay of Tm$^{170}$, Lu$^{177}$, Au$^{198}$, Sm$^{153}$, Re$^{186}$, Sr$^{90}$ and Y$^{90}$. 11

The measurement was measured according to the method of Mott-scattering, i.e. by determination of the azimuthal asymmetry in the single scattering of transversely polarized electrons by a scatterer with great Z into a great angle. The measuring device and the measuring method are discussed. The authors then discuss the calculation of the extrapolated value of the azimuthal asymmetry of single scattering and the calculation of the expected value of the azimuthal asymmetry of scattering. The results of the measurements discussed in this paper lead to the following conclusions:

1) The longitudinal polarizations of the electrons of all the investigated elements are equal, with an accuracy of 2 to 11%. 2) For the average value with respect to all elements the longitudinal polarization of the electrons is equal to y/c with an accuracy of 3%. 3) Within the range of from 100 to 600 keV the longitudinal polarization of the electrons of the Coulomb transitions does not depend on the energy (with an accuracy of $(4\pm7)$%). A formula is given for the Coulomb transitions which are forbidden in the first order.
The Measurement of the Longitudinal Polarization of the Electrons Emitted in 5- Decay of Tm\(^{170}\), Lu\(^{177}\), Au\(^{198}\), Sm\(^{153}\), Re\(^{186}\), Sr\(^{90}\) and Y\(^{90}\). II

There are 6 figures, 2 tables, and 9 references, 5 of which are Soviet.

ASSOCIATION: Akademiya nauk SSSR (AS USSR)

SUBMITTED: December 12, 1957

1. Electrons—Polarization measurement 2. Electrons—Sources
AUTHORS: Alikhanov, A. I., Yeliseyev, G. P., Lyubicov, V. A.

TITLE: The Polarization of the Electrons of RaE and Time-Parity (Polyarizatsiya elektronov RaE i vremennaya chetnost)

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1958, Vol 35, Nr 4, pp 1061-1062 (USSR)

ABSTRACT: In an earlier paper (Ref 1) the authors showed that the longitudinal electron polarization in $\beta$-decay acts of heavy nuclei (which corresponds to transitions forbidden in the first order, i.e. the so-called Coulomb (Kulon) transitions ($\Delta J \neq 2$) and the unical transitions ($\Delta J = 2$, $|\Delta m| = 1$) is equal to $v/c$ with 5% accuracy and is independent of electron energy. However, in one case (RaE) an anomaly in the shape of the $\beta$-spectrum is observed in spite of the Coulomb transition ($^4 \rightarrow ^0$). By employing a method already described (Ref 1) the authors determined the longitudinal electron polarization at the medium energies $E = 125$ and 390 keV. The Ra(E0)-source with an intensity of 5 mCi had a thickness of about 0.8 mg/cm$^2$. With $E = 125$ and 390 keV the longitudinal polarization $<\sigma> c/v$
The Polarization of the Electron of RaE and Time-Parity

of the electrons amounted to $0.733 \pm 0.06$ and $0.725 \pm 0.06$ (mean value $0.73 \pm 0.04$). B. B. Gashkenbeyn, S. A. Hemirovkaya and A. P. Rudik calculated the longitudinal electron polarization of RaE for the VA- and ST-variants in consideration of the non-conservation of spatial parity, but with conservation of parity with respect to time (but also for the case of the non-conservation of time-parity). The disturbance of time-parity is less than $7.5\%$. This is the most accurate estimate of the conservation of parity with respect to time that has hitherto been made. Possibilities of a further improvement of this estimation are pointed out in short. There are 8 references, 2 of which are Soviet.

SUBMITTED: August 20, 1958
AUTHORS: Alikhanov, A. I., Yaliseyev, G. P., Kamalyan, V. Sh., Ilyubimov, V. A., Moiseyev, D. N., Khripyan, A. V.

TITLE: Investigation of the Nature and the Spectra of Particles Produced by High Energy Nucleons (Issledovaniye prirody i spektrov chastits, generirovannykh nukleonami vysokoy energii)

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1959, Vol 36, Nr 2, pp 404-410 (USSR)

ABSTRACT: In the present paper the authors publish the results obtained by the investigation of particles which were produced by high-energy nucleons of cosmic radiation at an altitude of 3200 m above sea level. Investigations were carried out on Mount Aragats in Armenia. The experimental device used is shown by figure 1 in form of 2 sections which are vertical to each other. The device, in principle, consists of a mass spectrometer (6850 Oe), an additional hodoscope arrangement, and a five-layer thin-walled proportionality counter. Two series of measurements were carried out with generators (10 and 25 cm lead) and control tests "without generators" (0.3 - 2 cm lead total substance thickness). Measuring results can be divided into 2 groups: a) particles produced in the generators by neutral radiation,
Investigation of the Nature and the Spectra of Particles Produced by High Energy Nucleons

SOV/56-36-2-9/63

b) particles of stars produced by charged particles and single charged particles. Muons were excluded by means of the momentum-range method. Figures 1a, b show the results of momentum- and ionization measurements of secondary particles under 25 cm of lead of groups a) and b). Sufficient data could be obtained from the experimental material concerning secondary protons and partly also concerning deuterons. In 2 series of measurements carried out in the momentum range of 400-900 Mev/c 35 deuterons were observed, 10 of which had been produced by protons. Thus, cosmic radiation in an altitude of 3250 m had 3.5 times as many neutrons as protons. The momentum spectrum of deuterons in the "generatorless" tests with momenta $\geq$ 800 Mev/c had the form

$N(p) \sim p^{-\gamma}, \quad (\gamma \approx 2)$. Figure 3 shows the differential momentum spectrum of $\pi^-$-mesons which had been produced by neutrons, viz. measurements of shower-mesons and of single mesons (momenta: 400 - 7000 Mev/c); the course corresponds to $N(p) \sim p^{-\gamma}$, where $\gamma$ for the shower 1.7 for single $\pi^-$-mesons is equal to 2.4. Khiryan and Asatiani (Ref 4) found $\gamma = 1.5$ for the $\pi^-$-meson spectrum (shower), but they investigated the $\pi^-$-meson production by protons.
Investigation of the Nature and the Spectra of Particles Produced by High Energy Nucleons

In the momentum range of 125-700 MeV/c the mean value 0.945 was obtained for $N_{\pi^-}/N_{\pi^+}$ as a result of neutron action, and for stars produced by protons $N_{\pi^-}/N_{\pi^+} = 45/54$ was obtained. In figure 2 the mass distribution of the recorded particles is represented in the momentum range of 125-720 MeV/c (ionization $1.3 - 7I_{\text{min}}$) separately for single particles produced by neutrons and for multiple stars produced by neutrons. Particles with a mass 700-1300 m$_e$ were determined as amounting to 10% (measured according to the proton number). As regards the K-mesons determined, it may be seen from table 1, which gives a detailed account of all measuring results, that $N_{K^-}/N_{K^+} = 16/5$ and that in consideration of the producing particles, it holds that $N_{K^+}(p)/N_{K^+}(n) = 14/5$. Finally, a large number of investigation results concerning $\pi^-$ and K-mesons in the momentum range of 720-900 MeV/c is given. The authors in conclusion thank Professor A. I. Alkhanyan for his interest and discussions.
Investigation of the Nature and the Spectra of Particles Produced by High Energy Nucleons

and they express their gratitude to V. K. Kosmachevskiy, I. P. Karabokyan, V. P. Kanavota and V. V. Avakyan for their great help in organizing and carrying out the work. There are 4 figures, 2 tables, and 6 references, 4 of which are Soviet.

SUBMITTED: August 20, 1950
24.690 (1138, 1191, 1559)

AUTHORS: Alikhanov, A. I.; Galaktionov, Yu. V.; Gorodkov, Yu. V.; Seliseev, G. F.; Lyubimov, V. A.

TITLE: Measurement of the Chirality of the μ-Meson

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1960, Vol. 38, No. 6, pp. 1918 - 1920

TEXT: The muon chirality was measured by the authors of the present "Letter to the Editor" by a method described in Ref. 1. The method is based on the measurement of the scattering cross sections of polarized muons from polarized electrons. This cross section depends on the mutual orientation of the spins of the colliding particles. An independent measurement of the number of 5 showers was made, the showers being released by cosmic muons in magnetized iron and consisting of two or more particles. The experimental arrangement is shown in a Fig. and described in the text. About 500 muons pass through the apparatus every minute, one or two of these produce showers with \( m \geq 3 \). Up to now 116,000 showers with \( m \geq 3 \) have been recorded. The energies of the shower-producing muons were Card 1/3.
Measurement of the Chirality of the \(\mu\)-Meson

between 3 and 6.5 Bev. The following results were obtained from the experiments. For \(\mu^+\) mesons, the difference in the number of showers for two different directions of the current in the winding of the triangle (Fig.) gives the effect \(s_+ = -0.37 \pm 0.41\); \((s = (N_+ - N_-)/(N_+ + N_-))\); for \(\mu^-\) mesons, \(s_- = +0.82 \pm 0.42\). For both signs of the charges of the muon the effect is given by \(s = 0.58 \pm 0.29\). The theoretical value for a 50% polarization of the muon is 0.6. The sign of the effect corresponds to weak V-A interaction (according to which the spin of the muon is directed opposite to its momentum), that is, to a left-hand chirality of the \(\mu^+\) meson. The probability for the effect to be zero or negative is \(2 \times 10^{-2}\). The experiments are being continued to improve the statistical accuracy. There are 1 figure and 2 Soviet references.

ASSOCIATION: Institut teoreticheskoy i eksperimental'noy fiziki Akademii nauk SSSR (Institute of Theoretical and Experimental Physics of the Academy of Sciences USSR)

SUBMITTED: April 25, 1960
Card 2/3
AUTHORS: Alikhanov, A. I., Yeliseyev, G. P., Lyubimov, Y. A.

TITLE: Longitudinal Polarization of Beta Electrons from Au^{198}

PERIODICAL: Zhurnal eksperimental’noy i teoreticheskoy fiziki, 1960, Vol. 39, No. 3 (9), pp. 587-588

TEXT: The authors measured the polarization of Au^{198} electrons by means of an apparatus resembling the one described in Ref. 4, but improved in order to work with a beta source exhibiting a strong gamma background. The measurements were made in the range of 145 kev and 390 kev. Equal Au^{198} and Tm^{170} samples served as sources. The corrections for the two samples were mutually compensating. At 145 kev, the longitudinal polarization of Au^{198} beta electrons was $P_{Au}/P_{Tm} = 0.80 \pm 0.05$ relative to Tm^{170}, and was thus smaller than $-\nu/c$. Comparable values were obtained by P. Ye. Spivak and L. A. Mikaelian (Ref. 7). At 390 kev, $P_{Au}/P_{Tm} = 1.07 \pm 0.08$. A paper by D. V. Geshkenbeyn and A. P. Rudik is referred to as containing an explanation of the deviation from $-\nu/c$ at low energies.

Card 1/2
Longitudinal Polarization of Beta Electrons From Au^{198}

In the case of heavy nuclei, polarization for first forbidden transitions is to be expected to deviate from -v/c in that region of the beta spectrum where there is a deviation from the Fermi shape. There are 9 references: 6 Soviet, 5 US, and 1 Dutch.

SUBMITTED: April 30, 1960
AUTHOR: Alikhanov, A. I.; Bayatyan, G. L.; Brakhman, E. V.; Galaktionov, Yu. V.;
Veliagov, G. P.; Tech, T. A.; Zeldovich, O. Ya.; Landsberg, L. G.; Lysimov, V.

TITLE: Elastic backward scattering of p mesons by neutrons in the 1.4-4.0 GeV/c pulse range.

SOURCE: Zhurnal eksperimental'noy i teoreticheskoj fiziki. Pis'ma v redaktsiyu.

ABSTRACT: The elastic backward scattering reaction $p + n \rightarrow p + n$ is studied in the
pulse range of 1.4-4.0 GeV/c. 1700 events of this reaction were selected with a pion
scattering angle of $90^\circ$. The solid angles for these events were measured in the
plane of measurement in the horizontal plane $15^\circ$ and in the vertical plane $-5^\circ$.)

ASSOCIATION: None.
Abstract: Under the conditions prevalent at the Kargachevskoye Machine and Tractor Station in Saratovskaya Oblast (where the annual precipitation is 250–360 mm), estuary irrigation on chestnut and light chestnut soils increased the green mass yield of corn by 250 centners per ha. The methods of constructing these estuaries are discussed. — F.N. Sofiyeva.
KULIKOV, N., st.reshiy mekganik; YEKLETVYV, I., tekar'.

Repair of "ZIS-5" engines in a harbor workshop. Mer. flst., 7
no.74/48 Jl '47. (MLRA 9:6)
(Latvia--Harbors) (Gas and oil engines)
Switching meat plants to a seven-hour workday. Mias. ind. SSSR, no. 2:6-10 '57. (MLRA 10:5)

I. Ministerstvo pramolnomasti maysynkh i molochnykh produktov SSSR.

(Hours of labor)
YELISEYEV, I., KUZNETSOV, V.

Labor productivity during the 6-hour day. Sots. trud 4 no. 7: 104-107 J1 '60. (MIRA 13:8)

1. Direktor Severouralskikh boksitovykh rudnikov (for Yeliseyev). 2. Nachal'nik otdeIa truda i zarabotnoy plat; Severouralskikh boksitovykh rudnikov (for Kuznetsov).

'Hours of labor'  'Labor productivity'
Experience of the Riga Meat Combine ("Establishing production standards and wages according to output in the sausage industry")
Mias. ind. SSSR 32 no. 2: 51-52 '61.
(Riga—Sausages) (Wages and labor productivity)
(Levina, L.) (Dobronog, A.) (Rakovskaja, F.)
NIKOLAYEV, Viktor Arsen'evich; DOLIVO-DOBROVOL'SKIY, Vladimir Vital'ye-
vich; YELLISSEYEV, I.A., red.; GOROKHOVA, T.A., red. izd-va; GURO-
VA, O.A., tekhn. red.

[Fundamentals of the theory of processes of magmatic activity and
metamorphism] Osnovy teorii protsessov magmatizma i metamorfizma.
Moskva, Gos. nauchno-tekh. izd-v.: lit-ry po geologii i okhrane nedr,

(Magma) (Metamorphism (Geology))
DENISENKO, K.; YELISEYEV, I.

Improve the system of bonus payments to engineers and technicians.
Mias.Ind. SSSR 34, no.1:47-50 '63. (MIRA 16:4)

1. Moskovskiy gorodskoy sovet narodnogo khozayastva.
   (Wages— Meat industry) (Incentives in industry)


1. Saratov (Province) Statisticheskoye upravleniye. 2. Nachal'nik Statisticheskogo upravleniya Saratovskoy oblasti (for Dryuchin). (Saratov Province—Statistics)

L.A., kontr-admiral, red.; SHCHEKINSKII, V.A., prof., doktor
L.A., kontr-admiral, red.; SHCHEKINSKII, V.A., prof., doktor
L.A., kontr-admiral, red.; STASHEVSKII, G.I., prof., doktor
voenno-morskikh nauk, inzh.-kapitan 1 rangu, red.; SOLOV'YOV, I.I.,
dots., kand. voenno-morskikh nauk, kapitan 1 rangu, red.; STASHEVSKII, K.A., kontr-admiral, red.; STASHEVSKII, G.I., prof., doktor
voenno-morskikh nauk, inzh.-kapitan 1 rangu, red.; TOMASHOVICH, A.V., prof., doktor
voenno-morskikh nauk, inzh.-kapitan 1 rangu, red.; TRIBUNTS, V.I., kand. voenno-
nauk, Liatr-admiral v otstavke, red.; TRIBUNTS, V.I., kand. voenno-
nauk, Liatr-admiral v otstavke, red.; TRIBUNTS, V.I., kand. voenno-
nauk, Liatr-admiral v otstavke, red.; CHMOHNYCHENKO, I.I., kontr-admiral, red.; morskich nauk, admiral, red.; CHMOHNYCHENKO, I.I., kontr-admiral, red.; morskich nauk, admiral, red.; CHMOHNYCHENKO, I.I., kontr-admiral, red.;


(Continued on next card)


(Ocean--Maps)
AUTHOR: Yeliseyev, I.D., Commander

TITLE: Two Proposals (Dva p. dolozheniya)

PERIODICAL: Grazhdanskaya aviatsiya, 1958, Nr 12, p 14 (UBER)

ABSTRACT: The author, who had the day before returned from the Shkola vysshey letnoy podgotovki (School for Advanced Air Training), expected to be soon making regular flights in the Il-18 on all the major air routes on all the major airlines. He supported the views expressed by Yu. V. Barkhash on raising the efficiency at airfields, improving cooperation between aviation units, increasing freight loadings, and establishing more precise communications between air and ground crews.
Shnitser, Solomon Solomonovich; Yelisseyev, I.D., inzh., reцензент;
Novikov, V.G., inzh., спетс. ред.; Kurbut, L.V., ред.;
Sokolova, I.A., техн. ред.

[Potentials for increasing labor productivity in the meat industry] Rezervy rosta proizvoditel'nosti truda v miasnoi
(MIRA 17:4)
YELISEYEV, I. G., Cand Agr Sci -- (diss) "Effectiveness of varied differentiation of the protein level in the ration of swine during the fattening period." Moscow, 1960. 18 pp; (All-Union Order of Lenin Academy of Agricultural Sciences im V. I. Lenin, All-Union Scientific Research Inst of Animal Husbandry, Division of the Feeding of Agricultural Animals); 150 copies; price not given; (KL, 17-60, 162)

S.1: Knizhnaya Letopis', No. 6, 1956.
MAKKATSOVA, N.M.; BELOGUETSEV, I.D.; VARAKSIN, V.N.; YELISEYEV, I.K.;
ZYSMAN, A.I.; VOINOV, A.P., prof., rezensent; CHECHKO, E.I.,
red.; KUZ'MENOK, P.T., tekhn. red.

[Principles of designing apartment houses] Osnovy proektirovaniia

1. Minsk. Belorussskiy politekhnicheskiy institut. 2. Deystvitel'-
nyy chlen Akademii stroitel'stva i arkhitektury SSSR i chlen-
korrespondent Akademii nauk SSSR (for Voinov).
(Apartment houses)
(Architecture—Designs and plans)
YELISEYEV, I.P.

'Acclimatization of Ussurian plum in Gorkiy Province. Agrobiologia no.4:623-626 Jl-Ag '63. (MIRA 16:9)

1. Gorkovskiy sel'akhozyaystvennyy institut.
   (Gorky Province—Plum)
   (Gorkiy Province—Acclimatization(Plants))
YELISETYEV, I.P.

Introduction and acclimatization of the cherry Ceramus tomentosa (Thunb.) Wall. in Gorkiy Province, Biul. Glav. bot. sada no. 48: 17-24 '63. (MIRA 17:5)

1. Sel'skokhozyaystvennyy institut, Gorkiy.
YELISEYEV, I.S., mashinist

Useful suggestion of the efficiency experts. Elek. i tepl.
tiaga 5 no.6:17 Je '61.

(MTRA 14:10)

1. Depo Likhobory.
   (Diesel locomotives—Equipment and supplies)
BIBINA, I.A.; VETRENOKO, Ye.A.; DIYEV, N.P.; YELISEEV, I.S.; KLUSHIN, D.N.; KUSAKIN, P.S.

Speeding up the bessemer process of converting copper matte by oxygen-enriched air. TSvet. met. 29 no.7:10-17 J1 '56. (MLRA 9:10)

(Copper--Metallurgy) (Bessemer process)
Translation from: Referativny Zhurnal, Metallurgiya, 1958, Nr 4, p 66 (USSR)

AUTHORS: Mironov, M.G., Yeliseyev, I.S., Mel'nikov, A.G., Kroneberg, D.A., Sereda, B.K., Ustalov, V.A.

TITLE: Forty Years of Copper Industry in the Ural Region (Sorok let medny promyshlennosti Urala)

PERIODICAL: Byul. tsvetn. metallurgii, 1957, Nr 19-20, pp 55-60

ABSTRACT: Bibliographic entry
1. Copper industry—USSR

Card 1/1
TELISEV, I.S.

Results achieved and tasks ahead for the Institute. Trudy Unipromedi
no.2:3-8 '57.

1. Direktor nauchno-issledovatel'skogo i proyektnogo instituta
medny promyshlennosti.
(Nonferrous metals)
DIYEV, N.P. (deceased); YELISHEV, I.S.; KOCHEV, N.I.; PADUCHEV, V.V.;
VERMENICHEV, S.A.; SARKISOV, I.I.; MAL'TSEV, B.V.; KUSAKIN, P.S.

Use of oxygen in bessemerizing copper mattes in industrial
(MIRA 13:4)

(Copper—Metallurgy)
(Copper—Industrial applications)
YELISEYEV, I.S.

Basic trends in the development of the copper industry in the Urals. Met. 37 no. 11:1-6 N '64. (MIRA 18:4)
YELISEYEV, I.V., Geroy Sotsialisticheskogo Truda

S severoural'sk bauxite mines. Gor. zhur. no.10:14-15 0 '61.
(MIRA 15:2)

1. Direktor Severoural'skikh boksitovykh rudnikov.
   (Severoural'sk Region—Bauxite)
1. YELISEYEV, K. M.

2. USSR (600)

4. Scabies

7. Ear mange in silver fox and methods for controlling it. Kar. i zver. 5 no. 5, '52.


SO: Knizhnaya latonia' No 45, 5 November 1955, Moscow.
USSR/Zooparasitology - Parasitic Worms.

Abs Jour : Ref Zhur Biol., No 1, 1959, 953

Author : Yeliseyev, K.M.

Inst : Alm-Ata Zooveterinary Institute

Title : Data on Strongyloidiasis of Sheep

Orig Pub : Tr. Alm-Atinsk. zoovet. in-ta, 1956, 9, 169-185

Abstract : At a temperature of -18 degrees up to 97% of the eggs (E) of Strongyloides papillosus perished in 20 days. Drying under summer conditions at 24 - 25 degrees brought about the death of E after 1 - 1½ hours. A 1½% solution of formalin, 3% solution of creolin, and a 3 - 5% solution of carboxylic acid killed E of S. papillosus after ½ - 1 ½ hours. At 65 - 75 degrees the E were killed after 10 -15 minutes. Rhabdite-like larvae (RL) were killed at 6 degrees after 3 - 4 hours, under the influence
of direct sun rays in the summertime - after 25 - 30 minutes, the above-mentioned disinfecting substances killed RL after 5 - 10 minutes. The filarial larvae were more resistant to physical and chemical factors; they could live in sheep faces for 2 - 3 months and preserve their infecting powers. The usual disinfecting agents, biocidal treatment of manure, and the effect of direct sun rays in summer and freezing in winter safely decontaminated the larvae. At a temperature higher than 20 degrees a larger number of RL developed into males and females of a free-living generation in 4 - 5 days. Free-living males and females did not develop from the filarial larvae in the experiment. At a temperature below 10 degrees and higher than 35 degrees the females did not produce E or larvae, and a larger number of them died. S. papillosus first appeared in lambs 20 days-old: 100% contamination by these parasites was
USSR/Zooparasitology - Parasitic Worms.

Abs Jour : Ref Zhur Biol., No 1, 1959, 953

already registered in month-old lambs; the intensity of the invasion increased up to 3 months of age. The highest intensity of contamination of sheep was observed in March and April, and in the summer and fall periods it was decreased 7-10-fold or more. -- N.V. Demilov
VELIYEV, K. M.

USSR/Diseases in Farm Animals. Diseases Caused by Arachno-Entons.

Abs Jour: Ref Zhur-Biol., No 12, 1958, 54956.

Author: Musina, F. Kh., Veliev, K. M.
Inst: Alma-Ata Institute of Zoology and Veterinary Sciences.
Title: On the Problem of Clinical Manifestation and Treatment of Notoedrosis in Cats.

Orig Pub: Tr. Alma-Atinsk. zoovet. in-ta, 1956, 9, 202-204.

Abstract: Notoedrosis manifests itself in a scaly form mostly, which resembles born itch in large horned cattle. In long furred cats the lesions are more pronounced. The diseased cats were treated with the ASD f-3 compound, which was used either in a pure form or in a 10 percent oil emulsion. In cats treated with the pure preparation side effects were observed. The 10
USSR/Diseases in Farm Animals. Diseases Caused by Arachno-

Abs Jour: Ref Zhur-Biol., No 12, 1958, 54956.

percent emulsion did not cause any side effects, and the cats recovered after a repeated treatment in 5-6 days. Also, good results were obtained by administering a slightly heated naphtalene-camphor ointment.
ELISEYEYEV, K. M. and KOCHEGANOV, Kh. E. (Docents), PERSADAEV, O. P. (Candidate of Veterinary Sciences), ATACHKIN, Zh. A. and TULAKIN, V. I. Veterinary Doctors, Semipalatinsk Zooveterinary Institute).

"The work of helminthological brigades..."
Veterinariya, vol. 39, no. 2, February 1962 pp. 15
Field shower (SDV-0) mechanized washing of farm animals. Vetro-
narilla 39 no.6 73-76 Je '62 (MIRA 18:1)

1. Semipalatinskiy soveterinatnyy institut.
1. ANDRIEVSXIY, I. V., YELISEYEV, L. N.

2. USSR (600)

4. Jerboas

7. Data on the ecology of jerboas in the territory of the Kamyshin-Strelizgrad state shelterbelt. Biul.NOIP. Otd. biol No. 5 1952