BAZAROV, I.P.

Theory of fusion. Vest. Mosk. un. Ser. 3: Fiz., astron. 18 no.3:18-25 My-Je '63. (MIRA 16:10)

1. Kafedra statisticheskoy fiziki i mekhaniki Moskovskogo universiteta.

S/020/63/148/006/008/023
B112/B186

AUTHOR: Bazarov, I. P.

TITLE: Vlasov's equation for crystals

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 148, no. 6, 1963, 1283-1285

TEXT: It is shown that Vlasov's equation with a self-consistent field for variations of the crystal density at the temperature T = 0 gives the well-known equations of small oscillations which determine unambiguously the entire Born spectrum of the crystal eigenfrequencies.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov)

PRESENTED: November, 12, 1962, by N. N. Bogolyubov, Academician

SUBMITTED: September 11, 1962

Card 1/1

BAZAROV, I.P.

Measure of mechanical motion. Ist. i metod. est. nauk 2:284-285 '63. (MIRA 16:11)

BAZAROV, I.P.

Quasi-modial and phase transitions. Zhur. fiz. khim. 37 no.11:2545-2548 N'63. (MIRA 17:2)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

BAZAROV, I.P.

Self-consistent method and the crystal model problem. Vest. Mosk. un. Ser. 3: Fiz., astron. 18 no.6:85-90 N-D '63. (MIRA 17:2)

1. Kafedra statisticheskoy fiziki i mekhaniki Moskovskogo universiteta.

ACCESSION NR: AP4014445 S/0188/64/000/001/0056/0061

AUTHOR: Bazarov, I. P.

TITLE: Solution of the kinetic equation of A. A. Vlasov for a crystal

SOURCE: Moscow. Universitet. Vestnik. Seriya 3. Fiz. astron., no. 1, 1964, 56-61

TOPIC TAGS: crystal, crystal vibration, kinetics, statistical mechanics, Vlasov equation, Born equation, distribution function, lattice vibration

ABSTRACT: The linearized kinetic equation proposed by A. A. Vlasov (Teoriya mnogikh chastits. GITTL, M., 1950) for the variation in the distribution function of a statistical system $\varphi(\vec{r},\vec{p},t)$:

$$\frac{\partial\varphi}{\partial t}+\frac{1}{m}(\vec{p},\nabla_r\varphi)-(\nabla_r U_\varphi,\nabla_p\varphi)=(\nabla_r U,\nabla_p f_0). \qquad (1)$$

where $f_0(\vec{r},\vec{p})$ is the equilibrium distribution function, is solved for a crystal at a temperature of OK assuming the adiabatic incorporation of an infinitesimally small displacement. It is found that the Born frequency spectrum of the vibrations native to

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ACCESSION NR: AP4014445

the crystal lattice is completely determined by Vlasov's equation and is unique in this equation. The required solution is given by

$$\varphi(t,\vec{r},\vec{p}) = -\sum_i (\vec{Q}_i \nabla_{\vec{r}}\delta(\vec{r}-\vec{r}_i))\,\delta(\vec{p}) - \sum_i (\vec{P}_i \nabla_{\vec{p}}\delta(\vec{p}))\,\delta(\vec{r}-\vec{r}_i), \qquad (2)$$

where $\vec{Q}_i$ and $\vec{P}_i$ are determined by

$$m\frac{d\vec{Q}_i}{dt} = \vec{P}_i, \quad \frac{d\vec{P}_i}{dt} = -\nabla_{\vec{r}_i}\sum_j \left(\nabla_{\vec{r}_i}\Phi(|\vec{r}_i-\vec{r}_j|), \vec{Q}_i-\vec{Q}_j\right), \qquad (3)$$

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ACCESSION NR: AP4014445

i.e. by the Born equation for the small vibrations in a crystal. "The author thanks Academician N. N. Bogolyubov for his evaluation of the paper." Orig. art. has: 25 formulas.

ASSOCIATION: Kafedra statisticheskoy fiziki i mekhaniki Moskovskogo Universiteta (Department of Statistical Physics and Mechanics, Moscow State University)

SUBMITTED: 19Mar63 DATE ACQ: 12Mar64 ENCL: 00

SUB CODE: SS, MA NO REF SOV: 002 OTHER: 000

Card 3/3

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000204110009-4"

BAZAROV, I.P.

The quantum kinetic equation and collective oscillations in crystals. Vest. Mosk.un. Ser. 3: Fiz., astron. 20 no.4:3-6 Jl-Ag '65. (MIRA 18:12)

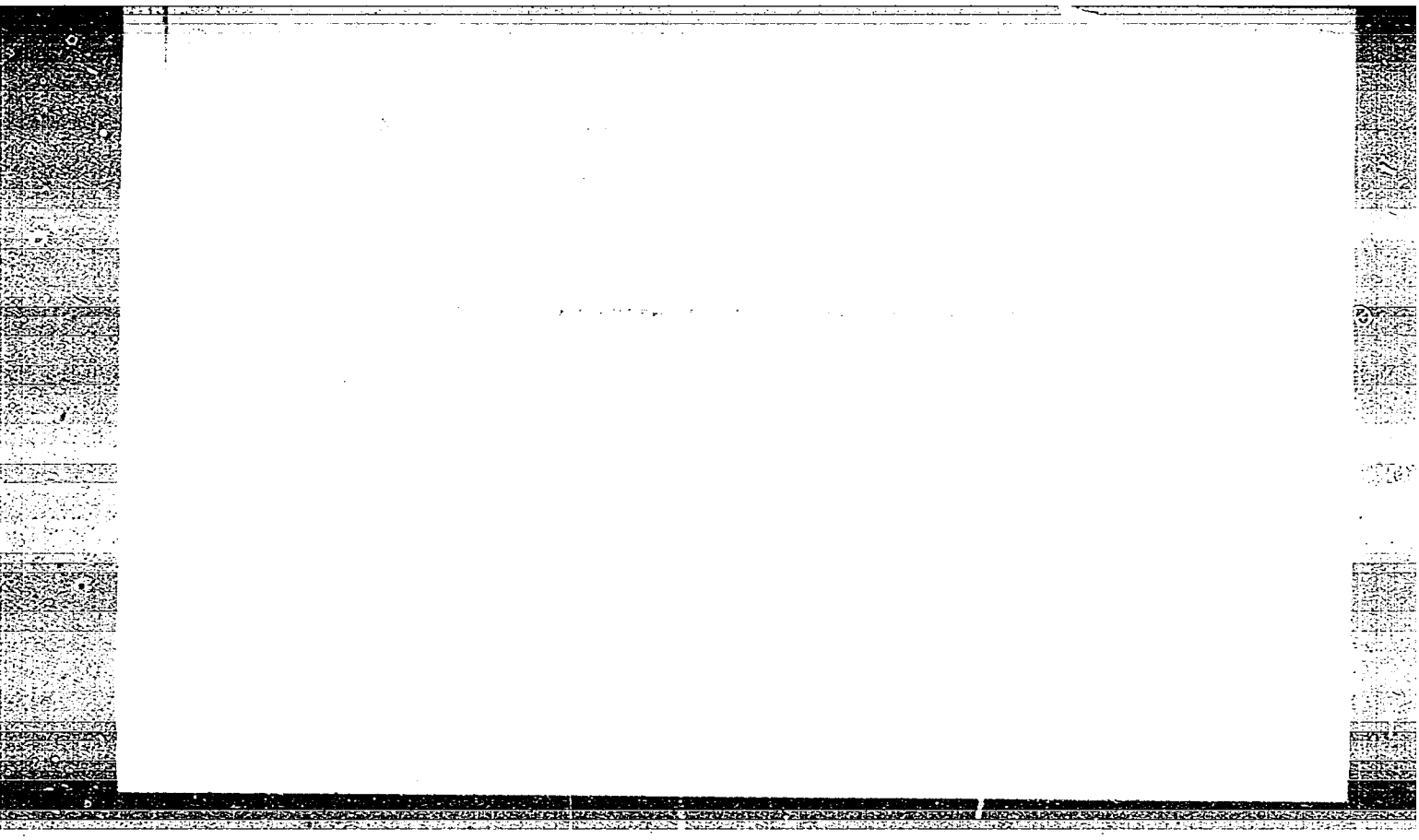
1. Kafedra teoreticheskoy fiziki Moskovskogo gosudarstvennogo universiteta. Submitted February 2, 1964.

SOURCE: Moscow. Universitet. Vestnik, Seriya 3. Fizika.

$\Psi(r)$ is the potential energy of interaction between particles. For a crystal

$$\Psi(\vec{r}) = \sum_{\vec{n}} \psi(\vec{r}) e^{-\frac{\vec{r}}{\vec{n}}},$$

where ψ is the [illegible]



APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000204110009-4"

BAZAROV, I.P.; GERASIMOV, Ya.I.; KISELEV, A.V.; PREDVODITELEV, A.S.; RADUSHKEVICH, L.V.; SKURATOV, S.M.; TIRLETSKIY, N.P.; CHMUTOV, K.V.; SHUBNIKOV, A.V.; SHULEYKIN, V.V.

Vladimir Ksenofontovich Semenchenko, 1894- ; on his 70th birthday. Zhur. fiz. khim. 39 no.5:1300-1301 My '65. (MIRA 18:8)

ARNAUTOV, N.V.; BAZAROV, L.Sh.; DOLGOV, Yu.A.; KIREYEV, A.D.; TYULENEVA, L.S.; SHUGUROVA, N.A.

Nature of the variation of the composition of solutions in the formation process of the fluorite-bearing chambered pegmatite. Dokl. AN SSSR 164 no.5:1147-1150 O '65.

(MIRA 18:10)

1. Institut geologii i geofiziki Sibirskogo otdeleniya AN SSSR.
Submitted February 15, 1965.

BAZAROV, L.Sh.

Temperature and pressure variations in the process of the formation of fluorite-bearing pegmatite. Dokl. AN SSSR 165 no.4:915-917 D '65. (MIRA 18:12)

1. Institut geologii i geofiziki Sibirskogo otdeleniya AN SSSR. Submitted June 2, 1965.

ARDASHEV, Gavriil Romanovich; BAZAROV, I.V.; MIKHAYLOV, I.N.; MORSHIN, A.V.; POLOTSKIY, I.V.; RUDENKO, A.I.; SITNIKOV, A.P.; SPERANSOV, N.N.; KRYUKOV, V.L., red.; DEYEVA, V.M., tekhn.red.

[Maintenance of tractors and agricultural machinery] Tekhnicheskoe obsluzhivanie traktorov i sel'skokhoziaistvennykh mashin. Moskva, Gos.izd-vo sel'khoz.lit-ry, 1961. 470 p. (MIRA 14:4)

(Tractors--Maintenance and repair)
(Agricultural machinery--Maintenance and repair)

SOBOLEV, V.S., akademik; DOLGOV, Yu.A., BAZAROV, L.B.; BURLENKO, I.T.; SHCHERBAKOVA, Z.V.

High-temperature inclusions in the minerals of pegmatites and granites. Dokl. AN SSSR 157 no. 2:349-352 Jl '64.
(MIRA 17:7)

1. Institut geologii i geofiziki Sibirskogo otdeleniya AN SSSR.

BAZAROV, L.Sh.; DOBRETSOVA, I.L.; YUSUPOV, S.Sh.

Characteristics of the distribution of fluorine around a chamber pegmatite in granites. Dokl. AN SSSR 157 no.5: 1137-1138 Ag '64. (MIRA 17:9)

1. Institut geologii i geofiziki Sibirskogo otdeleniya AN SSSR. Predstavleno akademikom V.S. Sobolevym.

BAZAROV, L.Sh.

Inclusions in apatites from the calcite-phlogopite veins of Slyudyanka. Trudy Inst., geol.i geofiz. Sib.otd. AN SSSR no.30:47-55 '64. (MIRA 18:11)

BAZAROV, M.I., kand. istoricheskikh nauk, kapitan 2-go ranga.

Training future officers in revolutionary and military traditions.
Mor. sbor. 48 no.10:10-15 O '65. (MIRA 18:9)

BAZAROV, V.

Relation between biology teaching and agriculture in Bulgarian schools (from "Narodnoe prosveshchenie," no.8, 1958). Biol. v shkole no.4:72-74 Jl-Ag '59. (MIRA 12:11)
(Bulgaria--Agriculture--Study and teaching)

BAZAROV, Vasil

Teaching biology in the general schools of the Bulgarian People's Republic. Biol. v shkole no.1:66-69 Ja-F '62. (MIRA 15:1)

1. Uchenyy sekretar' Instituta pedagogiki Bolgarskoy Akademii nauk.
(BULGARIA--BIOLOGY--STUDY AND TEACHING)

BAZAROV, V.G. (Ozerko Murmanskoy oblasti)

Atelectasis of the lung following tonsillectomy. Vest.otorin. 21 no.5:97-99 S-O '59. (MIRA 13:1)

(TONSILLECTOMY, compl.)
(ATELECTASIS, etiology)

BAZAROV, V.G.

Course and treatment of chronic tonsillitis in Arctic regions. Zhur. ush., nos. i gorl. bol. 22 no.1:22-28 Ja-F '62. (MIRA 15:5)

1. Iz kliniki bolezney ukha, gorla i nosa (nachal'nik - zasluzhennyy deyatel' nauki prof. K.L.Khilov) Voyenno-meditsinskoy ordena Lenina akademii imeni Kirova.

(TONSILS—DISEASES)

BAZAROV, V.G.

Use of the "delayed speech" phenomenon to detect feigned deafness. Zhur.ush. nos. i gorl. bol. 23 no.2:31-36 Mr.-Ap '63. (MIRA 16:8)

[redacted]

1. Iz akusticheskoy laboratorii otorinolaringologicheskoy kliniki (nachal'nik - zasluzhennyy deyatel' nauki prof. K.L.Khilov) Voyenno-meditsinskoy ordena Lenina akademii imeni S.M.Kirova.
(DEAFNESS) (MEDICAL TESTS) (MALINGERING)

BAZAROV, V.G. (Kiyev)

Use of the "delayed speech" phenomenon in the study of the interrelations of the vocomotor and auditory analysors. Vest. oto-rin. 25 no.2:83-87 Mr-Ap '63. (MIRA 17:1)

AUTHOR: Bazarov, V. G. (Major of medical service)

TITLE: Investigation of the vestibular analyzer by combined stimulation of its sensory neural receptors

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000204110009-4"

BAZAROV, V.O., mayor meditsinskoy sluzhby

Examination of the vestibular apparatus by the method of combined stimulation of its sensory nerve receptors. Voen.-med.zhur. no.7: 55-59 '64. (MIRA 18:5)

BAZAROV, V.G., mayor meditsinskoy sluzhby

Significance of the duration of nystagmus and vestibular counter-rotational illusion in the medical examination of flying personnel. Voen.-med. zhur. no.2:68-72 '65.
(MIRA 18:11)

L 42816-66 EWT(1) SCTB DD

ACC NR: AP6027252 SOURCE CODE: UR/0177/66/000/007/0057/0061

14
B

AUTHOR: Bazarov, V. G. (Major; Medical Corps; Candidate of Medical Sciences)

ORG: none

TITLE: The effect of secondary stimuli on the vestibulosensory reaction

SOURCE: Voyenno-meditsinskiy zhurnal, no. 7, 1966, 57-61

TOPIC TAGS: vestibular function, psychic stimulation, reflex activity, OLFACTION, VISION, VESTIBULAR DISTURBANCE

ABSTRACT: In order to test the ability of some secondary stimuli (odor of geraniol, toluene, or pyridine, intense sound, or electric current) to suppress or accentuate vestibulosensory reflexes, 179 experimental subjects (men and women, 16—42 years of age) and 30 controls were subjected to rotation (1 revolution per 2 sec) with the eyes closed in a Barany chair for 20 sec, after which the duration of the illusion of counter-rotation was determined. Following the control studies, which yielded a mean duration of 15.86 sec (3—44 sec) for this illusion, the experiments were repeated with the simultaneous application of secondary stimuli (odors blown into the nose, sound at 100—110 db and 1000 cps, or electric current at 5 ma and 10—25 v). As shown by the results in the table, some secondary stimuli had a significant

UDC: 616-001.12-06

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Secondary stimulus	No. of subjects	No. with a change in duration of the illusion		No. with no change in duration
		increase	decrease	
Toluene	55	12	30	13
Geraniol	55	24	21	10
Pyridine	55	43	8	4
Sound	60	14	39	7
Electric current	64	10	46	8
Controls	30	4	5	21

inhibitory effect on the vestibulosensory reflex in most cases, but the effect varied markedly from individual to individual. Statistical analysis showed that the accentuating effect of pyridine and the inhibitory effect of electric current were highly significant, while the inhibitory effects of toluene and sound were somewhat less significant (still at the 95% level). These results suggest the possibility of effectively inhibiting the vestibulosensory reflexes during flight by selective stimulation of certain receptor formations. Orig. art. has: 1 formula and 3 tables. [26]

SUB CODE: 06/ SUBM DATE: none/ ATD PRESS: 5066

Card 2/2

ACC NR: AP7005667 SOURCE CODE: UR/0413/67/000/002/0138/0138

INVENTOR: Abugov, D. I.; Bazarov, V. G.; Ganovskiy, G. A.; Malakhov, N. N.

ORG: none

TITLE: Experimental combustion chamber for a liquid rocket engine. Class 46, No. 190728

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 2, 1967, 138

TOPIC TAGS: combustion chamber, combustion chamber test, liquid propellant engine, [redacted]

ABSTRACT: The proposed experimental combustion chamber contains a cylindrical shell, a replaceable injector, and a nozzle unit with replaceable exhaust nozzles. In order to vary the natural frequency of the gas oscillations smoothly and to obtain the amplitude-frequency characteristic during a single firing of the engine, a movable piston is mounted in the

Card 1/3 UDC: 621.455

ACC NR: AP7005667

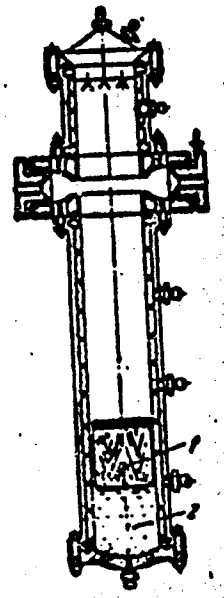


Fig. 1. Experimental chamber

1 - Piston; 2 - liquid.

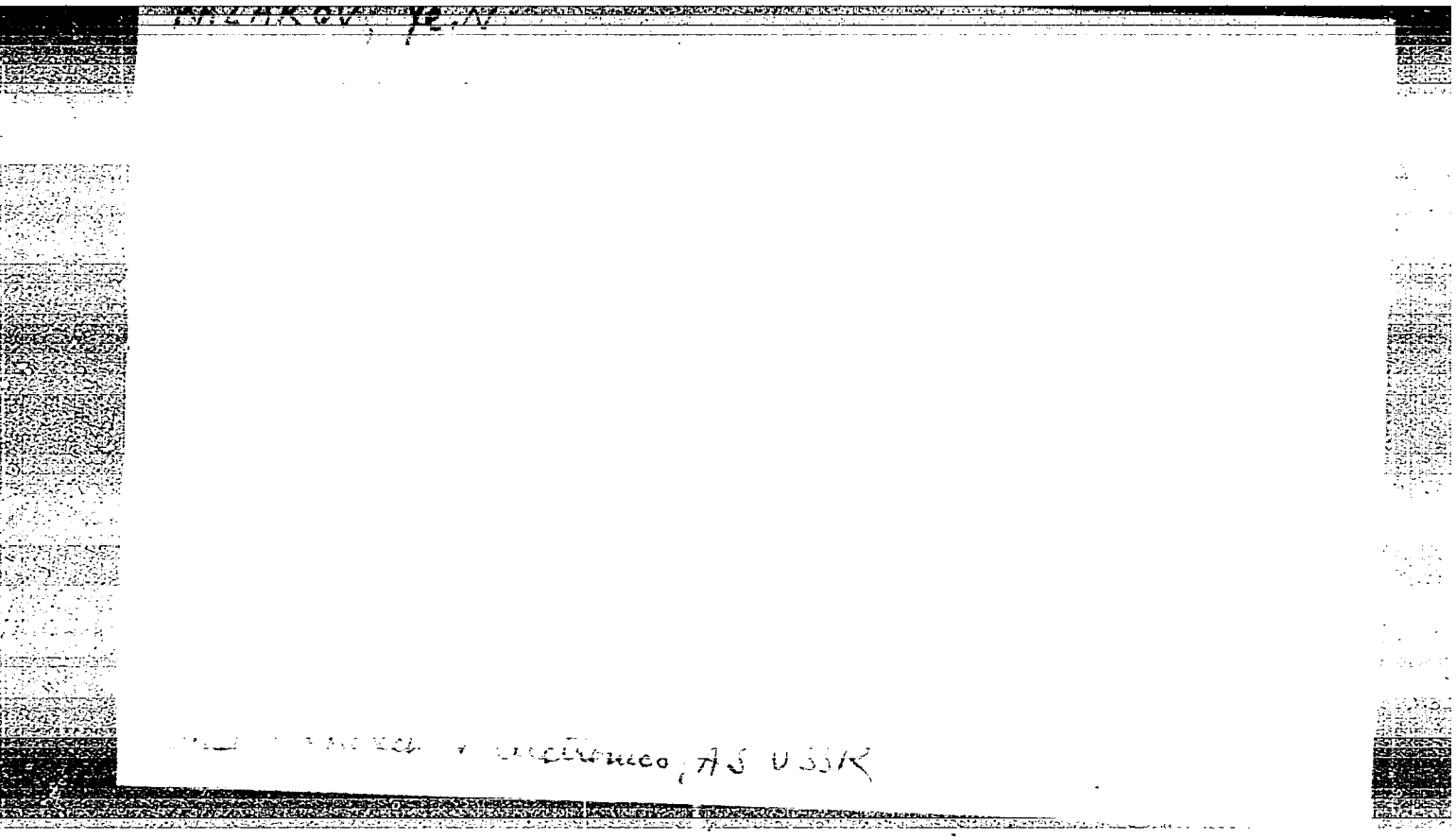
Card 2/3

V. V. BAZAROV

"Investigation of the Distribution of the Electromagnetic Field in the Interaction Space of Pulse Magnetrons in the Ten-Centimeter Band" from Annotations of Works Completed in 1955 at the State Union Sci. Res. Inst. Min. of Radio Engineering Ind.

So: B-3,080,964

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000204110009-4"



AUTHOR : Bazarov, Ye.N. and Zhabotinskiy, M.Ye.

"Frequency Conversion in a Reflex Klystron,"
A-U Sci Conf dedicated to "Radio Day," Moscow, 20-25 May 1957.

PERIODICAL: Radiotekhnika i Elektronika, Vol. 2, No. 9, pp. 1221-1224, 1957, (USSR)

[illegible], [illegible], [illegible], [illegible] ([illegible], Moscow)

"Fluctuations in a Reflex Klystron."

Investigated theoretically the fluctuations during synchronized operation with second order resonance and overtone synchronization. They also investigated self-oscillator fluctuations at an arbitrary transit angle.

report presented at the 1st All-Union Conference on Statistical Radio Physics, Gor'kiy, 13-18 October 1958. (Izv. vyssh uchev zaved-Radiotekh., vol. 2, No. 1, pp 121-127) COMPLETE card under SIFOROV, V. I.)

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S/109/60/005/04/022/028
E140/E435

9.4220

AUTHOR: Bazarov, Ye.N.

TITLE: Frequency Divider Using a Three-Grid Reflex Klystron

PERIODICAL: Radiotekhnika i elektronika, 1960, Vol 5, Nr 4, pp 681-684 (USSR)

ABSTRACT: This is a continuation of work briefly reported earlier (Ref 2,3). It is an experimental work carried out with the assistance of M.Ye.Zhabotinskiy. A double-resonator three-reflex klystron was used with an input of approximately 5000 Mcs to give an output of 2500 Mcs at power levels of the order of 10 mW. The capture band was of the order of 2 Mcs. There are 6 figures and 4 Soviet references.

SUBMITTED: November 24, 1959

Card 1/1

BAZAROV, Ye. N., Cand Phys-Math Sci -- (diss) "Resonance of the nth degree and synchronization to the nth overtone in a reflecting klystron." Moscow, 1960. 5 pp; (Ministry of Higher and Secondary Specialist Education RSFSR, Moscow Physics-Technology Inst); 150 copies; price not given; (KL, 23-60, 130)

SOV/109-59-4-2-14/27

AUTHORS: Bazarov, Ye.N. and Zhabotinskiy, M.Ye.

TITLE: Frequency Changing by Means of a Reflex Klystron (Preobrazovaniye chastoty na otrazhatel'nom klistrone)

PERIODICAL: Radiotekhnika i Elektronika, 1959, Vol 4, Nr 2, pp 253-261 (USSR)

ABSTRACT: The possibility of employing a reflex klystron as a frequency changer at U.H.F. is investigated theoretically. For the purpose of analysis it is assumed that a klystron can be represented by the equivalent circuit shown in Fig 1, where R, L and C are the equivalent parameters of a loaded resonator and i_k is the alternating component of the convection current. If the multiple transit of the electrons, the interaction of the electrons in the beam, the capture of the electrons at the grids and the transit time of the electrons in the grid gap are neglected, the equations for the klystron can be written as:

$$L\frac{di}{dt_1} + Ri = U + U_B$$

$$\frac{dU}{dt_1} = -\frac{i}{C} + \frac{i_k}{C} \qquad (1)$$

Card 1/5

Frequency Changing by Means of a Reflex Klystron

where U is the voltage at the grids of the resonator, $U_B = E \sin(n\omega t_1)$ is the external signal voltage, $n = 0, 1, 1/2, 1/3 \ldots$ i is the total current in the resonator and i_k is the alternating component of the convection current. Equations similar to Eq (1) were considered in a work of Bershteyn (Ref 3). If the notation shown on page 254 is adopted, Eq (1) can be written as Eq (2). Further, by eliminating y from Eq (2), the final equation is in the form of Eq (6). The solution of this equation is in the form of a superposition of the oscillations with multiple frequencies and is given by Eq (7). The amplitudes A, A_1 ..... and phases φ, φ_1 are slowly variable functions of time and can be obtained by solving Eq (8). The functions Φ and Ψ in Eq (8) are defined by Eq (9). In the case of a resonance of the second kind and the synchronization at the second harmonic ($n = 2$), functions Φ and Ψ can be expressed by Eq (10). The conditions of stability of the steady-state regime are defined by Eq (11). These can also be written as Eq (13), where m is the regeneration

Card 2/5

Frequency Changing by Means of a Reflex Klystron

coefficient of the klystron and $v_1 = \mathfrak{F}/2\delta$. If the parameter φ_0 is eliminated from Eq (8), an expression in the form of Eq (12) is obtained. On the basis of Eq (12), it is found that the threshold of the resonance of the second kind is given by Eq (15). From this it follows that: the threshold increases with the increase of the detuning parameter v_1; the increase of the regeneration leads to the reduction in the threshold of the resonance and the deviation of the transit angle from its optimum value causes the increase in the resonance threshold. The width of the resonance of the second kind is expressed by Eq (16) where Q is the quality factor of the resonator. The synchronization threshold at the second harmonic can also be found from Eq (12) and is defined by Eq (17). The synchronization bandwidth for the optimum transit angle is expressed by Eq (18). The dependence of the amplitude of the oscillations during synchronization at the second harmonic (at the voltage of the external signal) is illustrated in Fig 3. The synchronization effect was also investigated experimentally by employing a special reflex klystron

Frequency Changing by Means of a Reflex Klystron

fitted with two resonators and three or four grids (see Fig 4). The experiments carried out on a 3-grid reflex klystron corroborated the possibility of employing the tube as a frequency divider at U.H.F. It was possible to obtain an output power of 15 mW for input powers of 10-20 mW. The klystron can be used as a multiplier in two ways; the external signal of frequency f is applied to the tube which is tuned to a frequency nf; in the second case, the resonator frequency is the same as that of the external signal and the multiplication is obtained by extracting the n-th harmonic of the bunched current. When the klystron is synchronised at a sub-harmonic and used as a frequency multiplier, Eq (8) and (9) are also valid and in this case the functions Φ and Ψ (for n =0.5) are given by Eq (19). The amplitude of the steady state oscillations can be determined from Eq (20). If the n-th harmonic of the bunched current is employed, the functions Φ and Ψ are given by Eq (21), while the amplitude of the steady state voltage at the resonator gap is expressed by Eq (22).

Card 4/5

Frequency Changing by Means of a Reflex Klystron

The conditions of stability of the oscillator are expressed by Eq (11). The above two methods of frequency multiplication were confirmed experimentally. There are 5 figures and 5 Soviet references.

SUBMITTED: 17th June 1957

9.2500, 9.4220

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SOV/108-15-2-10/12

AUTHORS: Bazarov, Ye. N., Zhabotinskiy, M. Ye., Sverchkov, Ye. I.

TITLE: Frequency Multiplication by a Large Factor Using a Reflex Klystron

PERIODICAL: Radiotekhnika, 1960, Vol 15, Nr 2, pp 75-79 (USSR)

ABSTRACT: The paper deals with frequency multiplication by a large factor n using a standard reflex klystron. In principle, the input signal is applied at the airgap between the reflector and the resonator. However, in the practical application the input signal may be supplied to the klystron reflector by means of a coaxial line. The differential equation of the second order describing the processes in a reflex klystron is given. Using the first approximation of the above equation, and assuming that the amplitude of the input signal as well as that of the output signal is smaller than the constant

Card 1/5

Frequency Multiplication by a Large Factor Using a Reflex Klystron

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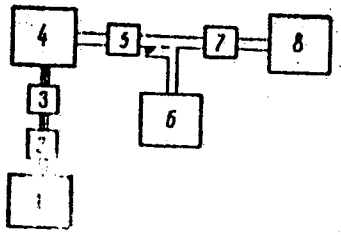
SOV/108-15-2-10/12

voltages on the klystron electrodes, expressions are derived which define: (1) the power of the output signal of frequency $f_{out} = nf_{in}$, where f_{in} is frequency of the input signal; (2) the band width Δf in which a stable multiplication is obtained. Δf depends on the cathode current, the reflector voltage, and on the factor n. The block diagram of an experimental installation for frequency multiplication is shown on Fig. 1.



Card 2/5 Fig. 1.

Here the input signal from the generator (1) is supplied through the measuring line (2), the attenuator (3), and through a coaxial line to the reflector of klystron (4). The klystron output signal passes through the attenuators (5) and (7) to the spectrum analyzer (6) and power measurer (8), respectively. The klystron operates as a regenerator. The klystron resonator is tuned to the n-th harmonic of the input signal. In the above installation, a standard 3-cm-wave klystron was used and frequencies $f_{out} = nf_{in} = 9{,}000$ to 10,000 Mc were obtained. The relationship between the output power and the multiplication factor n is shown on Fig. 2, where the power for n = 10 is assumed to be equal one.

Frequency Multiplication by a Larger Factor Using a Reflex Klystron

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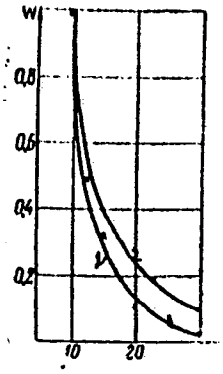

Card 4/5 Fig. 2

9,2585
9,4220

S/109/61/006/001/020/023
E140/E163

AUTHORS: Bazarov, Ye.N., and Zhabotinskiy, M.Ye.

TITLE: Fluctuations in a reflex-klystron oscillator caused by electron velocity scatter, shot and thermal effects

PERIODICAL: Radiotekhnika i elektronika, Vol.6, No.1, 1961, pp. 166-169

TEXT: Using symbolic equations and correlation theory the fluctuations in a reflex-klystron oscillator caused by the scatter of electron velocities in the beam, the shot and thermal effects are analyzed. Expressions are obtained for the mean-square amplitude and phase fluctuations and their spectra. It is shown that under certain conditions the electron velocity scatter can have a substantial influence on the fluctuation. There are 4 Soviet references.

SUBMITTED: June 15, 1960

Card 1/1

L 17283-63 EWP(j)/EPF(c)/EWP(q)/EWT(m)/BDS AFFTC/ASD Pr-4/
Pc-4 RM/WW/JD/JG

ACCESSION NR: AP3004383 S/0109/63/008/008/1483/1484

AUTHOR: Bazarov, Ye. N.; Zolin, V. F.; Samokhina, M. A.

TITLE: Effect of protective coating on the absorption cells in radio spectroscopes with optical indication on the frequency of transitions in the hyperfine structures of rubidium and cesium

SOURCE: Radiotekhnika i elektronika, v. 8, no. 8, 1963, 1483-1484

TOPIC TAGS: rubidium, cesium, radio spectroscope, hyperfine structure, transition frequency

ABSTRACT: C. O. Alley (Advances in Quantum Electronics, N.Y. 1961, p. 120) states that when the polysiloxane coating of glass was used for suppressing relaxation of spins of Rb atoms that collided with the cell walls, the 0-0- transition frequency, in the hyperfine structure of Rb^{87}, was shifted by -5 or -7 kc (with about 1-kc line width). The authors believe that the frequency shift

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L 17283-63
ACCESSION NR: AP3004383

4

is rather due to the presence of an extraneous gas. A number of experiments with Cs^{133} in a methyl-siloxane-coated glass cell corroborated this belief. Assistance of L. V. Minervina in mass-spectrometer investigations of the gas is noted. "The authors wish to thank M. I. Rodak and Ch. M. Briskina for discussing the work and valuable comments." Orig. art. has: 1 formula.

ASSOCIATION: none

SUBMITTED: 10Sep62 DATE ACQ: 20Aug63 ENCL: 00

SUB CODE: PH NO REF SOV: 001 OTHER: 003

Card 2/2

based on alkali element vapors. Class 21, No. 168335

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 4, 19[illegible], 36

Cord

L 11611-66 EWT(1)/EWA(h)
ACC NR: AP6000946 SOURCE CODE: UR/0286/65/000/022/0033/0034

INVENTOR: Bazarov, Ye. N.; Zolin, V. F.

ORIG: none

TITLE: Optical indicator of frequency standards. Class 21, No. 176317 [announced by the Institute of Radio Engineering and Electronics, AN SSSR (Institut radiotekhniki i elektroniki AN SSSR)]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 22, 1965, 33-34

TOPIC TAGS: frequency standard, frequency standard indicator, optical indicator

ABSTRACT: An optical indicator of frequency standards (shown in the accompanying figure) is proposed which has the form of a bulb with a pair of alkaline elements

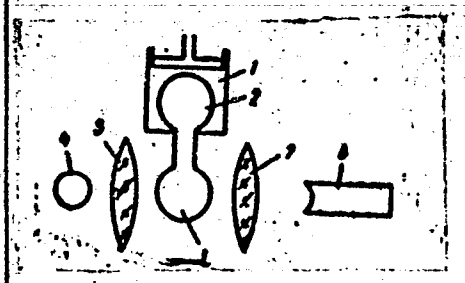

Fig. 1. Optical indicator of frequency standards

1 - Resonator; 2 - darkened region of the indicator bulb; 3 - optical illumination zone; 4 - gas discharge tube; 5 and 7 - lenses; 6 - photoindicator.

Card 1/2 UDC: 621.317.761

L 11811-66

ACC NR: AP6000946

in a buffer gas. To eliminate the effect of optical illumination on the frequency rating, the zone of interaction with the shf radiation and the zone of optical illumination are separated and located at opposite ends of the bulb. The bulb itself is elongated and dumbbell shaped. The pressure of the buffer gas assures diffusion of excited atoms in the zone of optical illumination during a period shorter than the relaxation time of these atoms. Orig. art. has: 1 figure. [JR]

SUB CODE: 09/ SUBM DATE: 14Sep62/ ATD PRESS: 4180

Card 2/2

ZAKOV, Yu. N.

"Leptospirosis in Man"

pp. 93 Voyenno-Med. Zhur. No. 10 October, 1955

MUKHINA, Lidiya Ivanovna; BUYANTUYEVA, B.R., red.; BAZAROVA, D.B., red.; ZILOTIN, Yu.V., red.

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1. Iz Leningradskogo instituta sovetskoy torgovli imeni F. Engel'sa.

BA[illegible]A, P. V. and [illegible], A. N.

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[redacted], P. V., [redacted], A. N. and [redacted], M. I.

"Detection of Foreign Bodies in Greases without Using Acid Analysis", p 224, in the Monograph "Investigation and Use of Petroleum Products", edited by N. G. Fuchkov, Gostoptekhizdat, Moscow-Leningrad, 1950.

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(Tax collection)

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[The economic life of the U.S.S.R.; chronicle of events and facts, 1917-1959] Ekonomicheskaia zhizn' SSSR; khronika sobytii i faktov 1917-1959. Glav. red. S.G.Strumilin. Chleny red. kollegii: Aleksenko i dr. Moskva, Gos. nauchn.izd-vo "Sovetskaia entsiklopediia," 1961. 779 p. (MIRA 14:10)

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(Construction industry--Dictionaries)

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[Commodity and monetary relations during the period of transition to communism] Tovarno-denezhnye otnoshcheniia v period perekhoda k kommunizmu. Moskva, Ekonomizdat, 1963. 386 p. (MIRA 16:5)

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GRUDEV, D.I., doktor sel'skokhoz. nauk; SADOVNIKOVA, N.V., starshiy nauchnyy sotrudnik; SMIRNITSKAYA, N.Ye.; KARAVAYEVA, S.G.; KOTOV, P.Ya.; RODIONOVSKIY, M.S.; KRYLOVA, N.N., kand. biol. nauk; KRASIL'NIKOVA, T.F., inzhener-khimik; SOLNTSEVA, G.L., aspirant; KUZNETSOVA, V.V., mladshiy nauchnyy sotrudnik; Prinimali uchastiye: BAZAROVA, K.I.; MALYGINA, M.I.; BUDINSKAYA, S.Z.; SINITSYNA, I.K.

Comparative evaluation of the fattening and slaughtering characteristics of Shorthorn and Kalmyk steers and physico-chemical indices of their meat. Trudy VNIIMP no.16:5-23 '64. (MIRA 18:11)

USSR/Human and Animal Physiology. Metabolism. Nutrition. T-2

Abs Jour: Ref Zhur-Biol., No 12, 1958, 55322.

Author : Belen'kiy, N.G., Krylova, N.N., Chertkov, I.L., Bazarova, K.I., Zuyeva, L.D., Sevost'yanov, B.A., Kel'man, L.F.

Inst : All-Union Academy of Agricultural Sciences.

Title : The Influence of Thermal Treatment on the Assimilation of Meat Protein.

Orig Pub: Dokl. VASKhNIL, 1957, No 4, 23-29.

Abstract: During a period of 6 days, 26 rats of 180-200 gr body weight each, received daily 10 gr of beef meat with methionine-S^{35} proteins. Seven control rats were given raw ground meat. Nine rats were fed ground meat which has been heated in an ultra-thermostate at 80° [C] for one hour, and 10 rats

Card : 1/2

BELEN'KIY, N.G., akademik; KRYLOVA, N.N.; BAZAROVA, K.I.

Studying changes occurring in S^{35}-labeled proteins during thermal denaturation. Dokl. akad. sel'khoz. 23 no.9:29-34 '58. (MIRA 11:10)

1.Vsesoyuzny nauchno-issledovatel'skiy institut myasnoy promyshlennosti.
(Sulphur--Isotopes) (Proteins)

KRYLOVA, N.N., kand. biologicheskikh nauk; BAZAROVA, K.I., mladshiy nauchnyy sotrudnik

Chemical method for determining the activity of powdered insulin. Trudy VNIIMP no.13:112-119 '62. (MIRA 17:5)

BELEN'KIY, N.G., akademik; KRYLOVA, N.N., kand. biologicheskikh nauk; BAZAROVA, K.I., mladshiy nauchnyy sotrudnik; SEVOST'YANOV, B.A., mladshiy nauchnyy sotrudnik; KUZNEKO, Ye.V., inzh.

Method for the preparation of "MP" hydrolyzates from blood proteins and their properties. Trudy VNIIMP no.13:120-144 '62. (MIRA 17:5)

1. Eksp. tekh Moskovskogo myasnogo kombinata (for Kuzenko).

KRYLOVA, N., kand.biol.nauk; BAZAROVA, K., inzh.

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1. Vsesoyuznyy nauchno-issledovatel'skiy institut myasnoy promyshlennosti.
(Insulin)

ZAKOSHCHIKOV, A.P.; KOVALEVA, M.K.; BAZAROVA, L.I.

Adsorption of sulfuric acid from diluted solutions by the cotton hulls during refining. Gidroliz.i lesokhim.prom. 12 no.2:5-7 '59. (MIRA 12:3)

(Cottonseed) (Sulfuric acid) (Adsorption)

BAZAROVA, L.M.; NEFEDOVA, M.G.; SHVAREVA, A.I.

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1. Kafedra gospital'noy pediatrii (zav. - prof. A.Kh.Khamidullina) i nauchno-issledovatel'skaya laboratoriya (zav. - S.V.Senkevich) Kazanskogo meditsinskogo instituta.

BAZAROVA, M.P.

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no.2:131-136 F '54. (MLRA 7:3)

1. Gosudarstvennyy institut psikhiatrii Ministerstva zdravookhraneniya RSFSR. (Typhoid fever) (Psychoses)

BAZAROVA N.V.

GORSHKOV, A.A., doktor tekhnicheskikh nauk, professor, redaktor; DUBITSKIY, G.M., kandidat tekhnicheskikh nauk, redaktor; BAZAROVA, N.V., inzhener; redaktor; YERMAKOV, N.P., tekhnicheskiy redaktor.

[Advanced founding technology; experience of Ural plants] Peredovaia tekhnologiia liteinogo proizvodstva; opyt Ural'skikh zavodov. Pod red. A.A.Gorshkova. Moskva, Mashgiz, 1953. 206 p.(MLRA 7:11)

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(Ural Mountain region--Founding) (Founding--Ural Mountain region)

KUZELEV, Mikhail Yakovlevich; SKVORTSOV, Aleksey Anatol'yevich; SMELYAKOV, Nikolay Nikolayevich; DUBITSKIY, G.M., doktor tekhn. nauk, retsenzent; ZOBNIN, B.F., kand. tekhn. nauk, retsenzent; KOROTKOV, V.G., kand. tekhn. nauk, retsenzent; LEVCHENKO, P.V., kand. tekhn.nauk, retsenzent; MAKURIN, P.I., kand. tekhn. nauk, retsenzent; PASTUKHOV, A.I., kand. tekhn. nauk, retsenzent; PORUCHIKOV, Yu.P., kand. tekhn. nauk, retsenzent; ROZENBERG, I.A., kand. tekhn. nauk, retsenzent; SERGEICHEV, N.F., kand. tekhn. nauk, retsenzent; FILIPPOV, A.S., kand. tekhn. nauk, retsenzent; YAROSHENKO, Yu.G., kand. tekhn. nauk, retsenzent; BAZAROVA, N.V., inzh., retsenzent; BLANK, E.M., inzh., retsenzent; VOLPYANSKIY, L.M., inzh., retsenzent; ZAKHAROV, B.P., inzh., retsenzent; MYSHALOV, S.V., inzh., retsenzent; RAZUMOVA, M.S., inzh., retsenzent; SHABALIN, L.A., inzh., retsenzent; SHKUNDI, R.M., inzh., retsenzent; DUGINA, N.A., tekhn. red.

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BAZAROVA, T.Yu.

Mineral-thermometric studies of inclusions in the minerals of certain nepheline rocks. Dokl. AN SSSR 161 no.4:925-928 Ap '65. (MIRA 18:5)

1. Institut geologii i geofiziki Sibirskogo otdeleniya AN SSSR.
Submitted October 1, 1964.

BAZAROVA, V.I.; SOLOV'YEVA, T.Ya.; GRIMM, A.I.

Study of oligosaccharides in some plants. Ukr. biokhim. zhur. 36 no.5:735-738 '64. (MIRA 18:6)

1. Kafedra tovarovedeniya prodovol'stvennykh tovarov Leningradskogo instituta sovetskoy torgovli im. F. Engel'sa.

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Using the paper chromatography method for investigating the sugars of buckwheat and linden honey. Izv. vys. ucheb. zav.; pishch. tekh. no.6:139-140 '63. (MIRA 17:3)

1. Leningradskiy institut sovetskoy torgovli imeni F. Engel'sa, kafedra tovarovedeniya prodovol'stvennykh tovarov.

BAZARYA, Mikhail Pavlovich

N/5
722.102
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KRATKOSROCHNOYE KREDITOVANIYE SOVKHOZOV (STATE FARM SHORT TERM CREDIT) MOSKVA, GOSFINIZDAT, 1956. 70 p. TABLES.

UMAROV, S.; IVANOV, I.; SOBOLEV, A.; KRASNOV, V.; VASILEVSKIY, I.; POTAPKIN, I.; IL'ICHEV, N.; PIZENGOL'TS, M.; SOKRATOV, K.; CHURSIN, A.; KAUGER, V.; VOLOVODOV, A.; BAZARYA, M. P.

Issuing credit to collective farms should be equal to the standard of the new tasks. Den. i kred. 16 no.4:3-26 Ap '58. (MIRA 11:5)

1. Upravlyayushchiy Uzbekskoy kontoroy Gosbanka (for Umarov). 2. Zamestitel' upravlyayushchego Rostovskoy oblastnoy kontoroy Gosbanka (for Ivanov). 3. Upravlyayushchiy proizvodstvenno-ekspluatatsionnogo otdela Sakhalinskoy oblastnoy kontory Gosbanka (for Sobolev). 4. Nachal'nik proizvodstvenno-ekspluatatsionnogo otdela Sakhalinskoy oblastnoy kontory Gosbanka (for Krasnov). 5. Zamestitel' upravlyayushchego Belorusskoy respublikanskoy kontoroy Gosbanka (for Vasilevskiy). 6. Nachal'nik otdela kreditovaniya sel'skogo khozyaystva i zagotovok Ukrainskoy respublikanskoy kontory Gosbanka (for Potapkin). 7. Upravlyayushchiy Mordovskoy respublikanskoy kontoroy (for Il'ichev). 8. Starshiy prepodavatel' Voronezhskogo sel'skokho zyaystvennogo instituta (for Pizengol'ts). 9. Saratovskiy ekonomicheskiy institut (for Sokratov). 10. Upravlyayushchiy Sovetskim otdeleniym Gosbanka Krasnodarskogo kraya (for Chursin). 11. Upravlyayushchiy Gorodishchenskim otdeleniyem Gosbanka Penzenskoy oblasti (Kauger). 12. Upravlyayushchiy Zherdevskim otdeleniyem Gosbanka Tambovskoy oblasti (for Volovodov). 13. Nachal'nik Upravleniya sel'skogo khozyaystva i zagotovok Gosbanka (for Bazarya). (Agricultural credit)

BAZAROVA, M.P., mladshiy nauchnyy sotrudnik

Disorder of vascular tonus in traumatic vasopathy. Trudy Gos. nauch-issl.inst.psikh. 25:779-786 '61. (MIRA 15:12)

1. Klinika osnovnykh psikhozov Insitituta psikhiatrii Ministerstva zdravookhraneniya RSFSR (zav. klinikoy - prof. L.L.Rokhlin).
(BRAIN—WOUNDS AND INJURIES)
(CEREBROVASCULAR DISEASE)

SOBOLEV, V.S., akademik; BAZAROVA, T.Yu.

Crystallization temperature of disthene in pegmatites.
Dokl. AN SSSR 153 no.4:920-922 D '63. (MIRA 17:1)

1. Institut geologii i geofiziki Sibirskogo otdeleniya AN SSSR.

BAZANOVA, Mikhail Pavlovich

[Supplying credit to collective farms; a guide for workers of the State Bank and collective farms] Kreditovanie kolkhozov; posobie dlia rabotnikov Gosbanka i kolkhozov. Moskva, Gosfinizdat, 1960. 103 p. (MIRA 14:10)

(Agricultural credit)

BAZARIATSKII, Iu. A.

Bazariatskii, Iu. A. New technique of focussing X-rays. P. 292.

SO: Progress in the Physical Sciences, Vol. XLIV, No. 2, June 1951, (Uspekhi)

ACCESSION NR: AP4017618 S/0033/64/041/001/0090/0096

AUTHOR: Bazarzhapov, A. D.

TITLE: The determination of the total vector of solar magnetic field strength by means of an electronic computer

SOURCE: Astronomicheskiy zhurnal, v. 41, no. 1, 1964, 90-96

TOPIC TAGS: magnetic field, solar magnetic field, algorithm, digital plotting, nomograph

ABSTRACT: Algorithms for the determination of the total vector of solar magnetic field strength are described. A description of a program using these algorithms and compiled for the "BESM-2" electronic computer is given. A simplified block diagram of this program is described. Results of computation by the electronic computer and by the nomographic method are given. The results coincide within the limits of permissible errors. The advantage of the electronic computer is the gain in computing time by about a factor of 80. It is suggested that a special attachment to the electronic computer be constructed which would draw continuous lines (isomagnetic lines) being given co-ordinates of points on the curve. This would lead to further automation of the treatment of observational data, including the construction of charts of solar magnetic fields. Orig. art. has: 1 figure,

Card 1/2

ACC NR: AT6034607 SOURCE CODE: UR/3148/66/000/008/0005/0022

AUTHOR: Bazarzhanov, A. D.; Mishin, V. M.; Nemtsova, E. I.; Platonov, M. L.

ORG: none

TITLE: A method of analytical representation of instantaneous fields of magnetic variations

SOURCE: AN SSSR. Mezhduvedomstvennyy geofizicheskiy komitet. III razdel programmy MGG (Geomagnetizm i zemnyye toki). Sbornik statey, no. 8, 1966. Geomagnitnyye issledovaniya (Geomagnetic research), 5-22

TOPIC TAGS: geomagnetic field, spheric harmonic, universal time, algorithm, probable error, HARMONIC ANALYSIS

ABSTRACT: A geomagnetic field can be expressed by the spherical harmonic analysis completed by Legendre polynomials. This method was corrected and made independent of universal time. A special method was elaborated for the use for electronic computers by which instantaneous parameters of the variable magnetic field can be determined. This method is based on a special algorithm B in which components of the geomagnetic field X_i, Y_i, and Z_i of selected stations are determined

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ACC NR: AT6034607

using the formula

$$X(\theta_i, \lambda_i) = \sum_{n=1}^{M} \sum_{m=0}^{n} (g_n^m \cos m\lambda_i + h_n^m \sin m\lambda_i) \left[\frac{dP_n^m(\cos\theta)}{d\theta} \right]_{\theta=\theta_i}$$

i = 1, 2, 3,...N, where N is the number of stations used. The system of equations can be solved analytically when $N \leq M^2 + 2M$. When $N > M^2 + 2M$, the system can be solved by the method of least squares applying the orthogonal system of functions. Coefficients of the function expansion are determined by introduction of auxiliary coefficients computed from recurrent formulas. A series of tests was carried out using algorithm B. The goal of the first test was to evaluate errors of all the coefficients. The second test dealt with an evaluation of the change of coefficients. The third test consisted of a comparison of the magnetic field during a quiet sun with that based on probable errors of coefficients. Functions of electric currents were computed using formulas of spherical expansion. The depth of the nonconducting layer of the earth and the conductivity of the earth's core were computed using approximate harmonics. Numerical values of these parameters differ markedly from results obtained by other investigators. Orig. art. has: 6 figures, 9 tables, and 22 formulas.

SUB CODE: 08/ SUBM DATE: none/ ORIG REF: 006/ OTH REF: 008

Card 2/2

ACC NR: AT6034608 SOURCE CODE: UR/3148/66/000/008/0023/0030

AUTHOR: Mishin, V. M.; Bazarzhapov, A. D.

ORG: none

TITLE: Selection of a spectrum of Legendre polynomials approximating an observed S_q-field

SOURCE: AN SSSR. Mezhduvedomstvennyy geofizicheskiy komitet. III razdel programmy MGG (Geomagnetizm i zemnyye toki). Sbornik statey, no. 8, 1966. Geomagnitnyye issledovaniya (Geomagnetic research), 23-30

TOPIC TAGS: orthogonal function, conditional equation, function spectrum, approximate function, geomagnetic field, spheric harmonic, Legendre polynomial

ABSTRACT: A function valid for an interval of values [a, b] can be expressed by the formula

$$Y(x) = \sum_{k=1}^{\infty} d_k G_k(x),$$

where $G_K(x)$ is an orthogonal function of the form

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ACC NR: AT6034608

$$\int_a^b G_m(x) \cdot G_k(x)\,dx = 0$$

when $m \neq k$. This function is given as the result of measurements obtained in a station network consisting of irregularly spaced N stations. The problem of measured results can be solved by the method of least squares if the quadratic difference of the function given and the measured results have a minimum in the system of conditional equations. Coefficients d_k obtained solving the system of equations contain errors which depend upon the spectrum of $G_k(x)$ functions. When the $G_k(x)$ functions in the system are not orthogonal, they can be transformed into orthogonal by auxiliary functions in which the coefficients d_k are substituted for a_k. The accuracy of the coefficient a_k is analyzed for the whole station network and a part of the R stations. The optimal spectrum of approximate functions is obtained when the ratio $|\Delta a_k/a_k| < 1$. This condition of approximate functions is applied for determining the approximate geomagnetic field during a quiet sun. Results of measurements of components of the geomagnetic field potential are expressed by sums of spherical harmonics completed with Legendre polynomials. The system of these equations is transformed into a system containing coefficients and

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ACC NR: AT6034608

other orthogonal functions. Analysis of the new system showed that the error of coefficients a_k increases with the increase of the number of stations, and the ratio $\Delta a_k/a_k$ becomes constant after k continues to grow. Orig. art. has: 1 table, 1 figure, and 36 formulas.

SUB CODE: 08/ SUBM DATE: none/ ORIG REF: 004/ OTH REF: 001

Card 3/3

ACC NR: AT6034609 SOURCE CODE: UR/3148/66/000/008/0031/0051

AUTHOR: Afraymovich, E. B.; Bazarzhapov, A. D.; Mishin, V. M.; Nemtsova, E. I.; Osipov, N. K.; Platonov, M. L.; Urbanovich, V. D.

ORG: none

TITLE: Mean S_q-fields according to data for September 1958

SOURCE: AN SSSR. Mezhduvedomstvennyy geofizicheskiy komitet. III razdel programmy MGG (Geomagnetizm i zemnyye toki). Sbornik statey, no. 8, 1966. Geomagnitnyye issledovaniya (Geomagnetic research), 31-51

TOPIC TAGS: geomagnetic field, algorithm, spheric harmonic, geomagnetic coordinate, geographic coordinate, electroconductivity

ABSTRACT: The nature of the geomagnetic S_q-variations is unknown. Previous investigations made by the same authors are continued here using the same methods as before. A comparison was made between various groupings of stations and the systems of coordinates used for studying the magnetic variations during a quiet sun. The algorithm B used in earlier publications was insufficient for the solution of the problem of S_q-variations. The algorithm A was introduced which is analogous to that of Gauss and Shuster. The S_q-field was assumed to be equal to the magnetic field potential, and its components were

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ACC NR: AT6034609

expressed by sums of spherical harmonics from which the coefficients of expansion were determined. Computations of coefficients were made from various combinations of stations according to longitudinal zones and global distribution. Numerical values were given in tables. Analysis of variations of the amplitude c_1 of the computed first harmonic of the S_q-field and those of the observed field showed that errors obtained using geographic and geomagnetic coordinates differed very little. Approximate values of S_q-variations obtained using spherical functions expressed by geomagnetic coordinates of southern and low-latitude stations were nearer the observed values. The same effect was obtained for stations of northern middle latitudes using spherical functions expressed by geographical coordinates. A combination of stations by longitudinal zones yields better agreement between computed and observed values of S_q-variations. Different S_q-field values in longitudinal zones indicate that the electrical conductivity of zones is different. Maps of current whirls are given for both hemispheres. Orig. art. has: 10 figures, 10 tables, and 11 formulas.

SUB CODE: 08/ SUBM DATE: none/ ORIG REF: 005/ OTH REF: 006

Card 2/2

ACC NR: AT6034611 SOURCE CODE: UR/3148/66/000/008/0063/0081

AUTHOR: Bazarzhapov, A. D.; Mishin, V. M.; Nemtsova, E. I.; Troshichev, O. A.

ORG: none

TITLE: Diurnal rate of magnetic activity during the IGY

SOURCE: AN SSSR. Mezhduvedomstvennyy geofizicheskiy komitet. III razdel programmy MGG (Geomagnetizm i zemnyye toki). Sbornik statey, no. 8, 1966. Geomagnitnyye issledovaniya (Geomagnetic research), 63-81

TOPIC TAGS: magnetic activity, geomagnetic index, current system, magnetic field, solar zenithal distance, universal time [redacted], local time component, auroral zone, GEOMAGNETISM, geomagnetic disturbance

ABSTRACT: The diurnal rate of geomagnetic activity on perturbed days in 1957—1959 is studied using geomagnetic indices K of 92 observatories which followed the program of the IGY. The study is limited to the diurnal wave of geomagnetic variations and related to local time and universal time. Analysis of the diurnal wave of magnetic variations yielded the following results: 1) The first harmonic of the diurnal wave of equivalent amplitudes of magnetic activity on perturbed

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days is of the fundamental value. 2) Diurnal variations of magnetic activity can be related to both local and universal time. The component of universal time plays an important role in geomagnetic activity of perturbed days at all latitudes. 3) Variations of the component of local time by latitude and season can be represented as a superposition of two waves with maxima at noon and midnight. Phases of these waves do not change with latitude. These waves are analogous to the current system of a disturbed magnetic field. The error amplitude of the local time component attains a maximum at two geomagnetic zones: $\Phi = 63°—67°$ and $\Phi \approx 78°$. 4) The superposed waves are physically different. The level of disturbances is proportional to the square root of the cosine of the zenithal distance of the sun. The wave with a maximum at noon is predominant in equatorial and polar regions, and the wave with a maximum at midnight is predominant in the zone $\Phi = 63°—67°$. 5) The component of the universal time of variations consists of two parts, the symmetric and asymmetric, which differ from each other physically. The asymmetric part of the universal time component changes in phase by π in the transition from winter to summer of all latitudes. The error amplitude of the asymmetric part changes with latitude. The amplitude is near zero at middle latitudes and increases toward the auroral zone, being maximum at $\Phi = 78°$. The phase of the symmetric part of the universal time component is constant during the year, and the error

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amplitude of this part varies with the latitude like the change of the current system of the disturbed field. 6) The asymmetric part of the universal time component characterizes the magnetic activity during the rotation of the geomagnetic dipole and the distribution of the ionospheric conductivity. The symmetric part characterizes the dependence of the current system upon the eccentric rotation of the dipole. The authors thank V. S. Chesnokova for her help. Orig. art. has: 2 tables, 9 figures, and 32 formulas.

SUB CODE: 08/ SUBM DATE: none/ ORIG REF: 024/ OTH REF: 009

Card 3/3

KUDRYASHOV, B.A., prof.; ANDRIYENKO, G.V.; ULITINA, P.D.; BAZAS'YAN, G.G.; PASTOROVA, V.Ye.; SYTINA, N.P.; KALISHEVSKAYA, T.M.; SHIMONAYEVA, Ye.Ye.

Nature of hemorrhage in experimental radiation sickness in animals [with summary in English, p.60]. Probl.gemat. i perel.krovi 2 no.6: 3-11 N-D '57. (MIRA 11:2)

1. Iz biologo-pochvennogo fakul'teta Moskovskogo gosudarstvennogo universiteta.

(HEMORRHAGE, experimental,
x-ray induced in animals (Rus))
(ROENTGEN RAYS, injurious effects,
exper. hemorrh. induced in animals (Rus))

BAZAVAN, I.

Certain factors which affect resistance to light of dyed textiles. p. 181.

INDUSTRIA TEXTILA, Vol. 7, no. 4, Apr. 1956, Rumania.

SO: East European Accessions List, Lib. of Cong., Vol. 5, no. 10, Oct. 1956.

BAZAVAN, [illegible]

RUMANIA / Chemical Technology. Chemical Products and Their Application. Dyeing and Chemical Treatment of Textiles. H-34

Abs Jour : Ref Zhur - Khim., No 3, 1958, No 10,091

Author : Bazavan, Sohromm
Inst : Not given
Orig Pub : Ind. Textila, 1957, 8, No 6, 266-270

Title : The Effect of Wrinkle Resistant Finishes upon Fastness to Light of the Colors.

Abstract : The results of investigations on the effect which cotton fabric finishing with urea-formaldehyde resins has upon changes in the fastness to light of colors produced by dyeing with Rumanian-made direct dyes are reported. A considerable reduction in the fastness to light (2-3 marks) was noted with dyes such as chrysophenine, direct pink M, and direct claret 4N, while increases of fastness to light properties were noted with a number of dyes which are fixed by Cr and Cu salts, as well as with those dyes which were diazotized and combined on the fibers.

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RUMANI./Chemical Technology. Chemical Products and Their Applications. Dyeing and Chemical Treatment of Textile Fabrics. H

Abs Jour : Ref Zhur-Khimiya, No 6, 1959, 21942

Author : Calin, C., Bazavan, I.
Inst : -
Title : The Determination of the Color-Fastness of Dyes of Textile Materials.

Orig Pub : Ind. textila, 1958, 9, No 6, 228-230

Abstract : Results of the comparative determination of color-fastness of 50 dyes by two methods which were specified in project No 117 ISO are cited. Essential differences in the results of the evaluation are noted. -- K. Markuze

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H-169