

C O N T E N T S

N u m b e r 1

The Milne problem with perturbation on the boundary	<i>V. P. Grinin</i>	5
Numerical results for Sobolev's function Q of radiative transfer J. Buel, R. Kalaba, S. Ueno		23
Line formation in the presence of magnetic field II. Source function H. Domke		39
On brightness changes in close binary systems of Dwarf stars <i>V. G. Gorbatsky</i>		57
Congealed stars and multiple systems . . . O. H. Guseinov, H. I. Novruzova		65
On the motion of gas in close binary systems . . . Yu. P. Korovgakovskiy		71
On some characteristics of the flare activity of UV Ceti type stars. I <i>V. S. Oskanian, V. Yu. Terebikh</i>		83
Newton theory of rapidly rotating white Dwarfs <i>V. V. Papoyan, D. M. Sedrakian, E. V. Chubarian</i>		95
Evolution and radial pulsations of isothermal white Dwarfs with consideration of rotation, effects of neutronization and general relativity <i>Yu. L. Vartanian, A. V. Hovsepian</i>		107
The stability of the gravitating systems of point masses. I. The finite cylinder of radius <i>G. S. Bisnovatyi-Kogan</i>		121
On the problem of electromagnetic radiation of relativistic bunch of charged particles <i>V. Ya. Efimov</i>		135
On convection in the periodical gravitation field <i>L. N. Ivanov</i>		143
NOTES		
On a feature of Mira Ceti type long period variable stars . . . <i>R. A. Vardanyan</i>		159
The interaction of vortex and potential motions in relativistic hydrodynamics <i>E. A. Tyoonov, A. D. Chernin</i>		161

Number 2

The UBV-photometry of spiral galaxies Markarian 10 and 79 with Seyfert type nuclei	E. A. Dibay, V. M. Ljutay	169
The spectra of Markarian galaxies. III	M. A. Arakelian, E. A. Dibay, V. F. Yesipov, B. E. Markarian	177
On the surface brightness of the bars of spiral galaxies	A. T. Kalloghlian	189
On the spiral structure of the barred galaxies	O. V. Chumak	197
On the theory of nonstationary radiation transfer for anisotropic scattering	V. P. Grinlin	203
On the polarization of radiation of flare stars	V. P. Grinlin, H. Domke	211
The stability of gravitating systems of point masses. II. The cylinder with monoenergetic streams and the sphere with circular orbits	G. S. Bisnovaty-Kogan	223
The internal characteristics and cooling time of the hot barion stars.	G. S. Hagian, Ya. L. Vartanian	237
On the rotation of a configuration with a homogeneous material distribution in general relativity	G. G. Arutjunian, D. M. Sedrakian	259
Barions and antibarions in anisotropic universe	I. N. Mtshustin	271
On some characteristics of the flare activity of UV Ceti type stars. II	V. S. Oskanian, V. Yu. Terebikh	281
Shock waves in the gaseous streams in close binary systems of Dwarf stars	V. I. Tarannov	295

NOTES

Polarimetric and photometric observations of EV Lac during flares	K. A. Grigorian, M. A. Eritstan	303
The cooling of white Dwarfs	Z. F. Seydov, T. A. Eminzade	306
Electromagnetic radiation of a rotating magnetic multipole	S. A. Kaplan, V. Ya. Eitman	310
Interaction of vortex and potential motions in relativistic hydrodynamics. IV.	A. D. Chernin, E. D. Eidelman	314

Number 3

Flare stars in pleiades. II.	V. A. Ambartsumian, L. V. Mirzoyan, E. S. Parsamian, H. S. Chavushian, L. K. Erastova	319
The spectrophotometric study of some T Tauri—stars and rapid irregular variables	G. V. Zagceva	333

Spectrophotometric studies of nonstable stars. II. On the spectrum of RW Aurigae in the region 3080—6100 Å	D. Ghalange, L. Dtvan, L. V. Mirzogian	345
The results of spectral observations of CH Cygni for 1967—1969	G. N. Jimshelashvili	363
On the movement of matter in the envelope of P Sygni	E. R. Astafev	377
A spectroscopic study of luminous galactic nuclei	E. Ye. Khachikian, D. V. Weedman	389
Large-scale structural characteristics and photometry of NCG 3031 determined from equidensity curves	W. Hoegner, Z. Kadla, N. Richter, A. Strugatskaya	407
A polarimetric study of compact extra-galactic objects	V. A. Dombrovsky, M. K. Babadzhantanz, V. A. Hagen-Thorn, S. M. Houtkevitch	417
An angular diameter red-shift relation for rich clusters of galaxies . . . G. Pall		435
Quasistellar radio sources and optical quasistellar objects . . . M. A. Arakelian		457
Rotating white Dwarfs in general relativity	G. G. Arutyunian, D. M. Sedrakian, E. V. Chubarian	467
The determination of the potential energy of a gravitational system with the spheroidal symmetry	V. L. Afanashev	481
On nucleosynthesis of elements in S-process	V. S. Shorin, V. M. Gribunin, V. N. Kononov, I. I. Sidorova	489
On the nonlinear absorption coefficient of electromagnetic radiation in astrophysical conditions	S. A. Kaplan, G. M. Khaplanov, Yu. G. Khrnopulo	501
NOTES		
The frequency of the flare ups in star Haro 18	E. S. Parsamian	507
N u m b e r 4		
Galaxies with ultraviolet continuum. IV . . . B. E. Markarian, V. A. Lipovetsky		511
Morphology of some Markarian galaxies	A. T. Kalloglian	521
The discovery of variable circular polarization in the light of X-ray star Sco X-1	Yu. N. Gnedin, O. S. Shulov	529
Slow flare up in the Pleiades	E. S. Parsamian	547
Fuors	V. A. Ambartsamian	557
Noncoherent scattering I. Isotropic scattering	N. B. Yengibarian	573
Line formation in magnetic field. III. Formation of a Zeeman-triplet with unsplited upper level estimate of the influence of the magnetic field	H. Domke	587

Convection in the envelopes of main sequence A—F stars	<i>E. Ergma</i>	605
On the nature of pulsar radio emission	<i>A. K. Yukhtimuk</i>	611
To the problem of stability of adiabatic envelopes of stars <i>G. S. Btsnovaty-Kogan, Ya. B. Zeldovich, N. I. Shakura</i>		617
Stability and radial pulsations of the rotating neutron stars <i>Yu. L. Vartanian, A. V. Housepian, G. S. Hagian</i>		625
Quasiradial pulsations of rotating white Dwarfs and neutron stars in Newton's theory of gravity	<i>V. V. Papogyan, D. M. Sedrakian, E. V. Chubarian</i>	643
The relativistic effects at the envelope's formation in the time of the collapse of rotating star	<i>P. R. Amnael, A. H. Guseinov, F. R. Kasamov</i>	651
Number of free electrons in condensed substances depending on their density <i>A. M. Resikian</i>		655
The velocity variation of a star as a purely discontinuous random process. II. Massive stars in the clusters	<i>V. S. Kaliberda, I. V. Petrovskaya</i>	663
NOTES		
H _a — emission stars around γ Cygni	<i>M. A. Kazarian, E. S. Parhamian</i>	671

