

CONTENTS

Number 1

Number of scatterings of diffusing photons. III	<i>V. V. Sobolev</i>	5
The matrix equations of the diffusion of radiation. II	<i>R. I. Kostik</i>	17
To the non—relativistic theory of the rotating configurations <i>V. V. Papoyan, D. M. Sedraktan, E. V. Chubartan</i>		41
Galaxies with an ultraviolet continuum	<i>B. E. Markartan</i>	55
On the monochromatic reflection effect in close binaries	<i>I. B. Pustynick</i>	69
Observations of the supernova 1959b in NGC 4921	<i>R. Barbon</i>	85
A note on the hydrogen density in the clusters of galaxies .	<i>I. D. Karachentsev</i>	89
On the position of gas-dust layer in galaxy M 31	<i>E. N. Makarenko</i>	93
On the phase density of white dwarfs on the color-luminosity diagram <i>A. M. Eigenson</i>		106
Observational selection and statistics of the visual double systems. II. Statistics <i>B. I. Fessenko</i>		111
Photometric and colorimetric characteristics of eruptive stars. IV <i>R. E. Gershberg</i>		127

NOTES

A supernova in NGC 2276	<i>S. G. Iskudartan, R. K. Shakhbazian</i>	133
-----------------------------------	--	-----

Number 2

Number of scatterings of diffusing photons. IV	<i>V. V. Sobolev</i>	137
The matrix equations of the diffusion of radiation. III	<i>R. I. Kostik</i>	155
The function of distribution of appearing cosmic objects depending on momentum and mass	<i>A. G. Doroshkevich</i>	175
The equilibrium of the star with a phase transition	<i>Z. F. Seidov</i>	189
On the determination of star temperature surrounded by continuous gas envelopes or nebulae	<i>A. A. Bojarchuk</i>	203

Three-color photometry of Stephan's Quintet <i>A. T. Kalloghlian, N. L. Kalloghlian</i>	209
Spectrophotometric investigation of ϵ Aurigae <i>N. L. Ivanova</i>	223
On the interpretation of polarization variability of β Lyrae radiation. <i>O. S. Shulov</i>	233
The effects of gaseous jets in close binary systems <i>V. G. Gorbatzky</i>	245
The influence of periodical shock waves on the distribution of density in the atmosphere of the pulsating star <i>I. A. Klimishin</i>	259
The distribution of mass in galaxies by data of radial velocities and of photometry <i>V. S. Sizikov</i>	267

N u m b e r 3

On some nonlinear problems of radiative transfer in spectral lines <i>V. Ju. Terebizh</i>	281
On the asymptotic formulae for the X - and Y -functions in the theory of multiple scattering in a spectral line <i>D. I. Nagtner</i>	293
On the generalized Newtonian theory of gravitation <i>G. S. Sahakian, M. A. Mnatsakanian</i>	311
On the problem of polychromatic scattering in one-dimensional medium <i>N. B. Yengibartan</i>	325
On the magnetohydrodynamics of interstellar gas-dust medium. <i>E. J. Gidalevitch</i>	331
On the nonstationary diffusion of radiation in nonuniform medium . <i>I. N. Minin</i>	345
Spectrophotometric study of β CrB <i>Z. N. Chumak</i>	351
On the variability of envelope of the eclipsing binary CQ Cephei of Wolf-Rayet type HD 214419 <i>A. A. Guseinzade</i>	359
The analysis of hydrogen lines of the peculiar stars α^2 CVn and α γ Lyr <i>Y. V. Glagolevsky, K. I. Koslova</i>	367
Spectroscopic investigation of P Cyg <i>L. S. Luud</i>	379
Spectrophotometry of the F-stars. II. Atmospheres of 41 Cyg and ν Her <i>T. A. Kipper</i>	397
Dwarfs in some near groups of galaxies <i>E. V. Zvjagina</i>	411
NOTES	
On irregular galaxies of M 82 type <i>G. M. Thovmasian</i>	427

N u m b e r 4

On some functions encountered in the theory of light scattering . <i>V. V. Sobolev</i>	433
On nonstationary light scattering in stellar atmospheres <i>V. V. Leonov</i>	447
Transfer of resonance radiation in semiinfinite medium <i>Yu. Yu. Abramov, A. M. Dykhne, A. P. Napartovich</i>	459

On the investigation of the interstellar dust	<i>I. N. Minin</i>	481
On the conditions of formation of steady state systems as consequence of instability	<i>O. V. Chumak</i>	493
On the radius of neutron stars	<i>Yu. L. Vartanian</i>	497
The models of massive superdense bodies	<i>G. S. Sahakian, Yu. L. Vartanian</i>	503
On the nature of AR Andromedae	<i>B. E. Markarian</i>	511
Neutron star studded compact galaxies.	<i>F. Zwicky</i>	519
Blue compact galaxies in the Leo A and B clusters.	<i>F. Zwicky</i>	525
The colorimetry of nuclei of galaxies NGC 3310 and NGC 3351	<i>E. S. Parsamian</i>	529
Sculptor-type Dwarfs in the clusters of galaxies	<i>V. E. Karachentseva</i>	535
The investigation of distribution of real flattening of galaxies in clusters	<i>T. A. Agekian, N. K. Somoosina</i>	545
On radio emission of spiral galaxies	<i>H. M. Tovmassian</i>	555
Light and color curves of the 1967 Supernova in NGC 3389	<i>G. de Vaucouleurs, J. E. Solheim, R. Brown</i>	565
Distance modulus of NGC 3389	<i>G. de Vaucouleurs</i>	571
Photoelectric spectrophotometry of selected stars	<i>V. G. Karetnikov, Ju. A. Medvedev</i>	575
NOTES		
On the variability of polarisation of Crab nebula	<i>E. E. Khachikian, J. A. Einatlian</i>	581

Технический редактор Л. А. АЗИЗБЕКЯН

ВФ 04534. Подписано к печати 27/XII 1967 г. Тираж 870 экз. Изд. 2915. Заказ 364.
 Формат бумаги 70×108¹/₁₆. Печ. 10,25 л. Бум. л. 4,75. Усл. печ. л. 13.
 Уч. изд. лист. 9,2.

Типография Издательства АН Армянской ССР, Ереван, Барекамутян, 24.