

CONTENTS

Number 1

Transfer of resonance radiation in infinite medium	<i>D. I. Nagtner, V. V. Ivanov</i>	5
On one problem of the radiation non-linear transfer	<i>N. B. Yengibarian</i>	31
A gravitational instability of anisotropic homogeneous solutions	<i>A. G. Doroshkevich</i>	37
The model of an expanding superdense celestial body	<i>Y. L. Vartanian</i>	45
A detailed photometry and colorimetry of six spiral galaxies in the field of Virgo cluster	<i>B. E. Markarian, E. Y. Hovhannissian, S. N. Arakelian</i>	53
The virial mass-luminosity ratio and the instability of the different systems of galaxies	<i>I. D. Karatchentsev</i>	81
The variable star AG Dra	<i>A. A. Bogarchuk</i>	101
The photoelectric observations of AG Dra 1965	<i>T. S. Belyakina</i>	115

NOTES

On the question of interpretation of flare stars	<i>L. V. Mtrzyan</i>	121
On one possibility of the variation of the intensity of galactic radio sources	<i>V. A. Sanamian</i>	124
On the break of the frequency spectrum of the radio source Cassiopeia-A	<i>V. H. Malumian</i>	128
The Doppler-effect and the limitly admitted line of Balmer series	<i>L. N. Kurochka</i>	131

Number 2

Number of scattering of diffusing photons. I.	<i>V. V. Sobolev</i>	135
Transfer of resonance radiation in infinite medium. II.	<i>V. V. Ivanov, D. I. Nagtner</i>	147
Non-thermal radio emission, generated by coherent plasma waves	<i>V. V. Zaitsev, S. A. Kaplan</i>	169

Non-stationary diffusion of radiation in plane-parallel layer	<i>N. B. Yengibartan</i>	197
Spectrum of AG Pegasi in 1965	<i>L. S. Luud, M. E. Ilmas</i>	205
The physical nature of the continuous emission in the non-stable stars	<i>G. A. Gurzadian</i>	217

NOTES

On the probable explosion in NGC 3955	<i>H. M. Tovmassian</i>	236
---	-------------------------	-----

Number 3

Number of scattering of diffusing photons. II.	<i>V. V. Sobolev</i>	239
The diffusion of radiation in a spherical layer around a point source	<i>T. A. Germogenova</i>	251
The diffuse reflection from a non-steady medium	<i>N. B. Yengibartan</i>	267
Models of outer layers of main sequence hot stars	<i>V. G. Gorbatzky, A. K. Kolesov</i>	273
On the question of collisions of gas-dust clouds	<i>E. J. Gidalevich</i>	297
Some statistical characteristics of superclusters of galaxies	<i>I. D. Karachentsev</i>	307
The nuclei of southern barred galaxies	<i>H. M. Tovmassian</i>	317
Electrospectrophotometry of the $\lambda\lambda$ 4686, 5411 He II emission lines of the eclipsing binary Wolf-Raye V 444 Cygnus=HD 193576 . . .	<i>A. A. Guselnzade</i>	325
On the polarization variability of β Lyrae	<i>O. S. Shulov</i>	339
Autocorrelative and spectral analysis of light curves of SS Cyg, Z Cam and RU Peg	<i>F. I. Lukatskaya, G. A. Polischuk</i>	345
Period-radius relation for classic cepheids	<i>I. N. Latyshev</i>	355

NOTES

On polarization of light in the nebula IC 446	<i>E. S. Parsamian</i>	369
Two new planetary nebulae	<i>M. A. Kazarian</i>	371

REVIEW

H. Arp, Atlas of peculiar galaxies	<i>V. A. Ambartsumian</i>	373
--	---------------------------	-----

Number 4

The matrix equations of a diffusion of radiation. I.	<i>N. A. Yakovkin, R. I. Kostik</i>	379
On the theory of coherent synchrotron radiation of cosmical sources	<i>S. A. Kaplan</i>	409

On the correlation of the radio emission of barred galaxies with the appearance of their central parts	<i>H. M. Tovmassian</i>	419
The colorimetry of galaxy NGC 6946. I. <i>F. Börngen, A. T. Kalloghlian, E. Y. Khachtkian, J. A. Egnatlian</i>		431
The radio emission of the CTA 21 and CTA 102 sources in the metre range <i>R. D. Dagkesamunsky, T. V. Shabanova</i>		443
The spectrophotometry of Novae Her 1963.I.	<i>V. T. Doroshenko</i>	451
The spectrophotometric investigation of SS Cygni	<i>R. A. Bartaya</i>	467
The observational selection and statistics of the visual double systems. I. <i>B. I. Fessenko</i>		485
REVIEW		
The theory of stellar spectra	<i>D. I. Nagirner</i>	497

Технический редактор Л. А. АЗИЗБЕКЯН

ВФ 04795. Подписано к печати 30/XII 1966 г. Тираж 840 экз. Изд. 2763. Заказ 390.
 Формат бумаги 70×108¹/₁₆. Печ. 8,25 л. Бум. л. 4,25. Усл. печ. л. 11,6.
 Уч. изд. лист. 8,06.

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