

PHYSICS– USPEKHI

English edition of *Uspekhi Fizicheskikh Nauk*
June 2008 Volume 178 Number 6

Contents

Volume 51
Number 6
2008
Pages 535–644

REVIEWS OF TOPICAL PROBLEMS

- On nonadiabatic effects in phonon spectra of metals** 535
E G Maksimov, A E Karakozov

- The nature of accretion disks of close binary stars:
overreflection instability and developed turbulence** 551
A M Fridman, D V Bisikalo

- Generation of large-scale eddies and zonal winds
in planetary atmospheres** 577
O G Onishchenko, O A Pokhotelov, N M Astafieva

METHODOLOGICAL NOTES

- Colors of thin films, antiresonant phenomena in optical systems,
and the limiting loss of modes in hollow optical waveguides** 591
A M Zheltikov

CONFERENCES AND SYMPOSIA

- Scientific session of the Physical Sciences Division
of the Russian Academy of Sciences
dedicated to the centenary of L D Landau's birth
(22, 23 January 2008):** 601

- L D Landau: 100th anniversary (Introductory talk)** 601
A F Andreev

Continued overleaf

Contents continued

Formation kinetics of the Bose condensate and long-range order Yu M Kagan	603
Superfluid Fermi liquid in a unitary regime L P Pitaevskii	603
Lev Landau and the problem of singularities in cosmology I M Khalatnikov, A Yu Kamenshchik	609
Axial anomaly in quantum electro- and chromodynamics and the structure of the vacuum in quantum chromodynamics B L Ioffe	616
The theory of relativity and the Pythagorean theorem L B Okun	622
Bjorken and Regge asymptotics of scattering amplitudes in QCD and in supersymmetric gauge models L N Lipatov	631
 PERSONALIA	
Aleksei Alekseevich Abrikosov (on his 80th birthday) A F Andreev, A I Buzdin, A A Varlamov, Yu Kh Vekilov, L P Gor'kov, I E Dzyaloshinskii, Yu M Kagan, S I Mukhin, Yu A Osip'yan, L P Pitaevskii, S M Stishov, L A Falkovsky	637
 BIBLIOGRAPHY	
New books on physics and related sciences E V Zakharova	639
Physics news on the Internet Yu N Eroshenko	643