

# Юрий Николаевич Гнедин



(13.08.1935–27.03.2018)

Ушел из жизни выдающийся советский и российский астрофизик, доктор физико-математических наук, профессор, академик РАН, педагог и организатор науки, лауреат премии имени акад. А.А. Белопольского.

Юрий Николаевич Гнедин родился в Туле. В 1959 окончил Ленинградский политехнический институт, физико-механический факультет. В 1959–1984 работал в Физико-техническом институте им. А.Ф. Иоффе. С 1984 на протяжении более 30 лет был заместителем директора ГАО РАН по научной работе, заведовал Астрофизическим отделом.

В круг научных интересов Юрия Николаевича входили практически все области современной астрофизики, развитие которой неразрывно связано с его пионерскими работами в области теории переноса поляризованного излучения, поляризации вакуума, генерации высокоэнергичного излучения в тесных двойных системах и активных ядрах галактик, физики комет, космомикрoфизики и космологии. Совместно с Р.А. Сюняевым им было предсказано существование циклотронных линий в спектрах аккрецирующих нейтронных звезд. Под его руководством был разработан принципиально новый метод определения величин магнитных полей космических источников на основе поляриметрических наблюдений.

Юрий Николаевич был талантливым организатором науки. Он входил в состав Ученого совета ГАО РАН и целого ряда диссертационных советов ведущих научных Учреждений России, был членом Научного совета по астрономии ОФН РАН, а также членом Международного астрономического союза. На

протяжении 23 лет Ю.Н. Гнедин возглавлял Комитет по тематике больших телескопов (КТБТ), определяя стратегию развития наблюдательной астрофизики нашей страны.



Ю.Н. Гнедин был выдающимся педагогом и блестящим лектором. Им были созданы курсы лекций по релятивистской астрофизике, общей теории относительности и современным проблемам астрофизики, которые на протяжении многих лет он читал студентам Технического Университета Санкт-Петербурга. Юрий Николаевич был руководителем большого числа аспирантов, соискателей и докторантов.

Большой вклад Ю.Н. Гнедина в развитие российской науки и повышение ее престижа на международном уровне были отмечены премией им. академика А.А. Белопольского (1987 г.), Государственной стипендией выдающимся ученым Российской Федерации (1994 г.), медалью ордена «За заслуги перед отечеством» II степени (2006).

В честь Ю.Н. Гнедина названа малая планета (5084) Гнедин (Gnedin).

Ю.Н. Гнедин скончался 27 марта 2018 года.

*Степанов А.В., Девяткин А.В. ПАМЯТИ ПУЛКОВСКОГО АСТРОФИЗИКА Ю.Н. ГНЕДИНА*

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## Список основных научных публикаций Ю.Н. Гнедина:

1. AFANASIEV, VL; GNEDIN, YN; PIOTROVICH, MY; BULIGA, SD; NATSVLISHVILI, TM.  
DETERMINATION OF SUPERMASSIVE BLACK HOLE SPINS BASED ON THE STANDARD SHAKURA-SUNYAEV

- ACCRETION DISK MODEL AND POLARIMETRIC OBSERVATIONS  
ASTRONOMY LETTERS-A JOURNAL OF ASTRONOMY AND SPACE ASTROPHYSICS 44(6), 362-369 (2018)
2. MIKHAILOV, AG; PIOTROVICH, MY; GNEDIN, YN; NATSVLISHVILI, TM; BULIGA, SD.  
CRITERIA FOR RETROGRADE ROTATION OF ACCRETING BLACK HOLES  
MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY 476(4), 4872-4876 (2018)
  3. AFANAS'EV, VL; PIOTROVICH, MY; GNEDIN, YN; BULIGA, SD; NATSVLISHVILI, TM.  
SPECTROPOLARIMETRIC OBSERVATIONS OF MAGNETIC WHITE DWARFS WITH THE SAO 6-M TELESCOPE  
ASTRONOMY REPORTS 62(2), 138-143 (2018)
  4. MIKHAILOV, AG; GNEDIN, YN.  
DETERMINATION OF THE SPINS OF SUPERMASSIVE BLACK HOLES IN FR I AND FR II RADIO GALAXIES  
ASTRONOMY REPORTS 62(1), 1-8 (2018)
  5. PIOTROVICH, MY; GNEDIN, YN; NATSVLISHVILI, TM; BULIGA, SD.  
CONSTRAINTS ON SPIN OF A SUPERMASSIVE BLACK HOLE IN QUASARS WITH BIG BLUE BUMP  
ASTROPHYSICS AND SPACE SCIENCE 362(12), - (2017)
  6. EFIMOV, DK; BRUVELIS, M; BEZUGLOV, NN; DIMITRIJEVIC, MS; KLYUCHAREV, AN; SRECKOVIC, VA; GNEDIN, YN; FUSO, F.  
NONLINEAR SPECTROSCOPY OF ALKALI ATOMS IN COLD MEDIUM OF ASTROPHYSICAL RELEVANCE  
ATOMS 5(4), - (2017)
  7. PIOTROVICH, MY; GNEDIN, YN; NATSVLISHVILI, TM; BULIGA, SD.  
CONSTRAINING RECOILING VELOCITIES OF BLACK HOLES EJECTED BY GRAVITATIONAL RADIATION IN GALAXY MERGERS  
ASTROPHYSICS AND SPACE SCIENCE 362(6), - (2017)
  8. PIOTROVICH, MY; GNEDIN, YN; NATSVLISHVILI, TM; BULIGA, SD.  
POLARIZATION OF BROAD LINE EMISSION FROM AGNS WITH DETERMINED VIRIAL FACTORS  
MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY 468(1), 1245-1248 (2017)
  9. PIOTROVICH, M; SILANT'EV, N; GNEDIN, Y; NATSVLISHVILI, T; BULIGA, S.  
DETERMINATION OF MAGNETIC FIELDS IN BROAD LINE REGION OF ACTIVE GALACTIC NUCLEI FROM POLARIMETRIC OBSERVATIONS  
NEW ASTRONOMY 51, 65-68 (2017)
  10. GNEDIN, YN; PIOTROVICH, MY.  
FUTURE OF X-RAY ASTRONOMY: X-RAY POLARIZATION OF STELLAR MASS BLACK HOLES IN CLOSE BINARY SYSTEMS  
STARS: FROM COLLAPSE TO COLLAPSE, PROCEEDINGS OF A CONFERENCE HELD AT SPECIAL ASTROPHYSICAL OBSERVATORY, NIZHNY ARKHYZ, RUSSIA, 3-7 OCTOBER 2016. EDITED BY YU. YU. BALEGA, D. O. KUDRYAVTSEV, I. I. ROMANYUK, AND I. A. YAKUNIN. SAN FRANCISCO: ASTRONOMICAL SOCIETY OF THE PACIFIC, 2017, 510, 389-394 (2017)
  11. PIOTROVICH, MY; BULIGA, SD; GNEDIN, YN; MIKHAILOV, AG; NATSVLISHVILI, TM.  
DEPENDENCE OF THE SPIN OF SUPERMASSIVE BLACK HOLES ON THE EDDINGTON FACTOR FOR ACCRETION DISKS IN ACTIVE GALACTIC NUCLEI  
ASTROPHYSICS 59(4), 439-448 (2016)
  12. SILANT'EV, NA; GNEDIN, YN; PIOTROVICH, MY; NATSVLISHVILI, TM; BULIGA, SD.  
NEW MECHANISM OF RADIATION POLARIZATION IN TYPE 1 SEYFERT ACTIVE GALACTIC NUCLEI  
MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY 462(1), 2-11 (2016)
  13. PIOTROVICH, M; GNEDIN, Y; SILANT'EV, N; NATSVLISHVILI, T; BULIGA, S.  
GAMMA RAY EMITTING GLOBULAR CLUSTERS: POSSIBLE CONTRIBUTION FROM RELATIVISTIC JETS OF INTERMEDIATE MASS BLACK HOLES  
NEW ASTRONOMY 45, 29-31 (2016)
  14. PIOTROVICH, MY; SILANT'EV, NA; GNEDIN, YN; NATSVLISHVILI, TM; BULIGA, SD.  
THE MAGNETIC-FIELD STRUCTURE IN A STATIONARY ACCRETION DISK  
ASTRONOMY REPORTS 60(5), 486-497 (2016)
  15. GNEDIN, YN; PIOTROVICH, MY.  
NEW RESULTS IN SEARCHING FOR AXIONS BY ASTRONOMICAL METHODS  
INTERNATIONAL JOURNAL OF MODERN PHYSICS A 31(2-3), - (2016)
  16. PIOTROVICH, MY; GNEDIN, YN; SILANT'EV, NA; NATSVLISHVILI, TM; BULIGA, SD.  
MAGNETIC FIELD AND RADIUS OF THE INNERMOST STABLE CIRCULAR ORBIT NEAR SUPER-MASSIVE BLACK HOLES IN ACTIVE GALACTIC NUCLEI  
ASTRONOMISCHE NACHRICHTEN 336(10), 1013-1016 (2015)

17. GNEDIN, YN; PIOTROVICH, MY; SILANT'EV, NA; NATSVLISHVILI, TM; BULIGA, SD.  
POLARIZATION OF RADIATION AND BASIC PARAMETERS OF THE CIRCUMNUCLEAR REGION OF ACTIVE GALACTIC NUCLEI  
ASTROPHYSICS 58(4), 443-452 (2015)
18. PIOTROVICH, MY; GNEDIN, YN; SILANT'EV, NA; NATSVLISHVILI, TM; BULIGA, SD.  
A POLARIMETRIC METHOD FOR MEASURING BLACK HOLE MASSES IN ACTIVE GALACTIC NUCLEI  
MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY 454(1), 1157-1160 (2015)
19. MIKHAILOV, AG; GNEDIN, YN; BELONOVSKY, AV.  
DETERMINATION OF THE MAGNITUDE OF THE SPINS OF SUPERMASSIVE BLACK HOLES AND THE MAGNETIC FIELDS IN ACTIVE GALACTIC NUCLEI  
ASTROPHYSICS 58(2), 157-167 (2015)
20. PIOTROVICH, MY; BULIGA, SD; GNEDIN, YN; NATSVLISHVILI, TM; SILANT'EV, NA.  
MAGNETIC FIELD STRENGTH AT THE INNERMOST CIRCULAR ORBIT IN ACCRETION DISK OF SUPERMASSIVE BLACK HOLE IN ACTIVE GALACTIC NUCLEI: COMPARISON WITH THE EQUIPARTITION VALUE  
ASTROPHYSICS AND SPACE SCIENCE 357(2), - (2015)
21. GNEDIN, YN; MIKHAILOV, AG; PIOTROVICH, MY.  
THE MOST DISTANT QUASAR AT  $Z=7.08$ : PROBABLE RETROGRADE ROTATION OF AN ACCRETING SUPERMASSIVE BLACK HOLE  
ASTRONOMISCHE NACHRICHTEN 336(3), 312-315 (2015)
22. YABLOKOV, SN; GNEDIN, YN.  
DEPENDENCE OF THE SPINS OF SUPERMASSIVE BLACK HOLES IN QUASARS ON THEIR COSMOLOGICAL REDSHIFTS  
ASTRONOMY REPORTS 59(4), 271-276 (2015)
23. PIOTROVICH, MY; GNEDIN, YN; BULIGA, SD; NATSVLISHVILI, TM; SILANT'EV, NA; NIKITENKO, AI.  
MAGNETIC FIELDS OF COMPACT OBJECTS IN CLOSE X-RAY BINARY SYSTEMS  
PHYSICS AND EVOLUTION OF MAGNETIC AND RELATED STARS 494, 114-119 (2015)
24. GNEDIN, YN; PIOTROVICH, MY; KLYUCHAREV, AN.  
RYDBERG STATES OF ATOMS AND MOLECULES IN THE ATMOSPHERES OF VERY COOL STARS WITH MAGNETIC FIELDS  
PHYSICS AND EVOLUTION OF MAGNETIC AND RELATED STARS 494, 261-272 (2015)
25. PIOTROVICH, M. Y.; GNEDIN, Y. N.; BULIGA, S. D.; NATSVLISHVILI, T. M.; SILANT'EV, N. A.; NIKITENKO, A. I.; BALEGA, Y. Y.; ROMANYUK, I. I.; KUDRYAVTSEV, D. O..  
IN: PHYSICS AND EVOLUTION OF MAGNETIC AND RELATED STARS  
CONFERENCE: VOL. 494 OF ASTRONOMICAL SOCIETY OF THE PACIFIC CONFERENCE SERIES 114, (2015)
26. AFANAS'EV, VL; BORISOV, NV; GNEDIN, YN; BULIGA, SD; NATSVLISHVILI, TM; PIOTROVICH, MY.  
SPECTRAL DISTRIBUTION OF THE POLARIZED RADIATION FROM STANDARD ACCRETION DISKS IN ACTIVE GALACTIC NUCLEI: OBSERVATIONAL ANALYSIS  
ASTRONOMY REPORTS 58(10), 725-732 (2014)
27. PIOTROVICH, MY; GNEDIN, YN; BULIGA, SD; NATSVLISHVILI, TM.  
ULTRA HIGH ENERGY COSMIC RAY GENERATION IN BLACK HOLE MAGNETOSPHERE: TESTING BY POLARIMETRIC OBSERVATIONS  
ASTROPHYSICS AND SPACE SCIENCE 353(2), 625-631 (2014)
28. PIOTROVICH, MY; GNEDIN, YN; BULIGA, SD; NATSVLISHVILI, TM.  
WAVELENGTH DEPENDENCE OF POLARIZATION AND PHYSICAL MECHANISMS OF MAGNETIC FIELD GENERATION IN ACCRETION DISKS AROUND SUPERMASSIVE BLACK HOLES IN ACTIVE GALACTIC NUCLEI  
ASTRONOMY LETTERS-A JOURNAL OF ASTRONOMY AND SPACE ASTROPHYSICS 40(8), 459-463 (2014)
29. EFIMOV, DK; BEZUGLOV, NN; KLYUCHAREV, AN; GNEDIN, YN; MICULIS, K; EKERS, A.  
ANALYSIS OF LIGHT-INDUCED DIFFUSION IONIZATION OF A THREE-DIMENSIONAL HYDROGEN ATOM BASED ON THE FLOQUET TECHNIQUE AND SPLIT-OPERATOR METHOD  
OPTICS AND SPECTROSCOPY 117(1), 8-17 (2014)
30. GNEDIN, YN; GLOBINA, VN; PIOTROVICH, MY; BULIGA, SD; NATSVLISHVILI, TM.  
SPINS OF SUPERMASSIVE BLACK HOLES AND THE MAGNETIC FIELDS OF ACCRETION DISKS IN ACTIVE GALACTIC NUCLEI WITH MASER EMISSION  
ASTROPHYSICS 57(2), 163-175 (2014)
31. BULIGA, SD; GNEDIN, YN; NATSVLISHVILI, TM; PIOTROVICH, MY; SILANT'EV, NA.  
WAVELENGTH DEPENDENCE OF THE POLARIZATION OF RADIATION FROM AN ACCRETION DISK: TESTING

## ACCRETION DISK MODELS

ASTRONOMY LETTERS-A JOURNAL OF ASTRONOMY AND SPACE ASTROPHYSICS 40(4), 185-192 (2014)

32. IPATOV, AV; KHARINOV, MA; MARDYSHKIN, VV; MIKHAILOV, AG; GNEDIN, YN; PIOTROVICH, MY; EVSTIGNEEV, AA; DYAKOV, AA; SERGEEV, RY.  
INVESTIGATION OF THE RADIO EMISSION FROM ACTIVE GALACTIC NUCLEI: DETERMINING THE SPIN OF A SUPERMASSIVE BLACK HOLE  
ASTRONOMY LETTERS-A JOURNAL OF ASTRONOMY AND SPACE ASTROPHYSICS 40(4), 161-170 (2014)
33. SILANT'EV, NA; GNEDIN, YN; PIOTROVICH, MY; BULIGA, SD; NATSVLISHVILI, TM.  
POSSIBLE MECHANISMS FOR THE POLARIZATION OF THE RADIATION OF ACTIVE GALACTIC NUCLEI AND QUASARS  
ASTRONOMY REPORTS 58(2), 63-70 (2014)
34. GNEDIN, YN; PIOTROVICH, MY; BULIGA, SD; NATSVLISHVILI, TM.  
MAGNETIC FIELDS OF ACCRETION DISKS AND OUTFLOWS IN PROGRADE AND RETROGRADE BLACK HOLES  
ASTRONOMISCHE NACHRICHTEN 334(3), 264-267 (2013)
35. SILANT'EV, NA; GNEDIN, YN; BULIGA, SD; PIOTROVICH, MY; NATSVLISHVILI, TM.  
MAGNETIC FIELDS OF ACTIVE GALACTIC NUCLEI AND QUASARS WITH REGIONS OF POLARIZED BROAD H ALPHA LINES  
ASTROPHYSICAL BULLETIN 68(1), 14-25 (2013)
36. GNEDIN, YN.  
INVESTIGATING SUPERMASSIVE BLACK HOLES: A NEW METHOD BASED ON THE POLARIMETRIC OBSERVATIONS OF ACTIVE GALACTIC NUCLEI  
PHYSICS-USPEKHI 56(7), 709-714 (2013)
37. GNEDIN, YN; BULIGA, SD; SILANT'EV, NA; NATSVLISHVILI, TM; PIOTROVICH, MY.  
TOPOLOGY OF MAGNETIC FIELD AND POLARIZATION IN ACCRETION DISCS OF AGN  
ASTROPHYSICS AND SPACE SCIENCE 342(1), 137-145 (2012)
38. GNEDIN, YN; AFANASIEV, VL; BORISOV, NV; PIOTROVICH, MY; NATSVLISHVILI, TM; BULIGA, SD.  
DETERMINING THE SPINS OF SUPERMASSIVE BLACK HOLES IN ACTIVE GALACTIC NUCLEI BASED ON SPECTROPOLARIMETRIC OBSERVATIONS  
ASTRONOMY REPORTS 56(8), 573-577 (2012)
39. SOKOV, EN; VERESHCHAGINA, IA; GNEDIN, YN; DEVIATKIN, AV; GORSHANOV, DL; SLESARENKO, VY; IVANOV, AV; NAUMOV, KN; ZINOV'EV, SV; BEKHTEVA, AS; ROMAS, ES; KARASHEVICH, SV; KUPRIYANOV, VV.  
OBSERVATIONS OF EXTRASOLAR PLANET TRANSITS WITH THE AUTOMATED TELESCOPES OF THE PULKOVO ASTRONOMICAL OBSERVATORY  
ASTRONOMY LETTERS-A JOURNAL OF ASTRONOMY AND SPACE ASTROPHYSICS 38(3), 180-190 (2012)
40. BULIGA, SD; GLOBINA, VI; GNEDIN, YN; NATSVLISHVILI, TM; PIOTROVICH, MY; SHAKHT, NA.  
INTERMEDIATE-MASS BLACK HOLES IN GLOBULAR CLUSTERS: CONSTRAINTS ON THE SPIN OF A BLACK HOLE  
ASTROPHYSICS 54(4), 548-552 (2011)
41. KISELEV, AA; GNEDIN, YN; SHAKHT, NA; GROSHEVA, EA.  
INTERMEDIATE-MASS BLACK HOLES IN GLOBULAR CLUSTERS  
ASTROPHYSICAL BULLETIN 66(4), 436-441 (2011)
42. GNEDIN, YN; PIOTROVICH, MY; NATSVLISHVILI, TM.  
POLARIZATION OF AGN IN UV SPECTRAL RANGE  
ASTROPHYSICS AND SPACE SCIENCE 335(1), 187-192 (2011)
43. SILANT'EV, NA; PIOTROVICH, MY; GNEDIN, YN; NATSVLISHVILI, TM.  
POLARIMETRIC DIFFERENCES BETWEEN SCHWARZSCHILD AND KERR BLACK HOLES IN ACTIVE GALACTIC NUCLEI  
ASTRONOMY REPORTS 55(8), 683-688 (2011)
44. PIOTROVICH, MY; SILANT'EV, NA; GNEDIN, YN; NATSVLISHVILI, TM.  
MAGNETIC FIELDS AND QUASI-PERIODIC OSCILLATIONS OF BLACK HOLE RADIATION  
ASTROPHYSICAL BULLETIN 66(3), 320-324 (2011)
45. AFANASIEV, VL; BORISOV, NV; GNEDIN, YN; NATSVLISHVILI, TM; PIOTROVICH, MY; BULIGA, SD.  
SPECTROPOLARIMETRIC OBSERVATIONS OF ACTIVE GALACTIC NUCLEI WITH THE 6-M BTA TELESCOPE  
ASTRONOMY LETTERS-A JOURNAL OF ASTRONOMY AND SPACE ASTROPHYSICS 37(5), 302-310 (2011)
46. SILANT'EV, NA; GNEDIN, YN; PIOTROVICH, MY; NATSVLISHVILI, TM; BULIGA, SD.  
POLARIMETRIC CONSEQUENCES OF LARGE-SCALE STRUCTURE IN THE DISTRIBUTION OF GALAXIES AND QUASARS  
ASTROPHYSICS 53(4), 453-461 (2010)

47. ZAKHOZHAY, VA; GNEDIN, YN; SHAKHT, NA.  
CONTRIBUTIONS OF THE PULKOVO AND KHARKIV SCIENTIFIC SCHOOLS TO THE SEARCH FOR EXOPLANETS AND LOW-MASS DARK SATELLITES OF STARS  
ASTROPHYSICS 53(4), 575-591 (2010)
48. SILANT'EV, NA; PIOTROVICH, MY; GNEDIN, YN; NATSVLISHVILI, TM.  
LINEAR POLARIZATION OF THE RADIATION FROM ACTIVE GALACTIC NUCLEI AND THE REDSHIFT DEPENDENCE OF THEIR MAIN PARAMETERS  
ASTRONOMY REPORTS 54(11), 974-982 (2010)
49. KHARINOV, MA; FINKEL'SHTEIN, AM; IPATOV, AV; TSIOPA, OA; GNEDIN, YN; PIOTROVICH, MY.  
RADIO EMISSION OF THE COSMIC GAMMA-RAY BURST GRB 080319B: OBSERVATIONS OF THE AFTERGLOW USING TELESCOPES OF THE INSTITUTE OF APPLIED ASTRONOMY OF THE RUSSIAN ACADEMY OF SCIENCES  
ASTRONOMY REPORTS 54(9), 853-860 (2010)
50. SILANT'EV, NA; PIOTROVICH, MY; GNEDIN, YN; NATSVLISHVILI, TM.  
COMPARISON OF TWO METHODS FOR DETERMINING THE MAGNETIC FIELDS NEAR BLACK HOLES  
ASTRONOMY LETTERS-A JOURNAL OF ASTRONOMY AND SPACE ASTROPHYSICS 36(8), 549-553 (2010)
51. PIOTROVICH, MY; GNEDIN, YN; NATSVLISHVILI, TM; SILANT'EV, NA.  
MAGNETIC FIELDS OF ACTIVE GALACTIC NUCLEI AND QUASARS FROM THE SDSS CATALOG  
ASTRONOMY LETTERS-A JOURNAL OF ASTRONOMY AND SPACE ASTROPHYSICS 36(6), 389-395 (2010)
52. KARITSKAYA, E.A.; BOCHKAREV, N.G; HUBRIG, S.; GNEDIN, YU.N; POGODIN, M.A.; YUDIN, R.V.; AGAFONOV, M.I.; SHAROVA, O.I.  
THE FIRST DISCOVERY OF A VARIABLE MAGNETIC FIELD IN X-RAY BINARY CYGX-1 = V1357CYG  
INF. BULL. VAR. STARS 5950, 1 (2010)
53. SILANT'EV, NA; PIOTROVICH, MY; GNEDIN, YN; NATSVLISHVILI, TM.  
MAGNETIC FIELDS OF AGNS AND STANDARD ACCRETION DISK MODEL: TESTING BY OPTICAL POLARIMETRY  
ASTRONOMY & ASTROPHYSICS 507(1), 171-182 (2009)
54. DRANEVICH, VA; DMITRIYEV, PB; GNEDIN, YN.  
QUASIPERIODIC OSCILLATIONS IN THE LIGHT CURVE OF GRB 080319B  
ASTROPHYSICS 52(4), 534-544 (2009)
55. PIOTROVICH, MY; GNEDIN, YN; NATSVLISHVILI, TM.  
COUPLING CONSTANT FOR AXION AND ELECTROMAGNETIC FIELDS AND COSMOLOGICAL OBSERVATIONS  
ASTROPHYSICS 52(3), 412-422 (2009)
56. GNEDIN, YN; MIHAJLOV, AA; IGJATOVIC, LM; SAKAN, NM; SRECKOVIC, VA; ZAKHAROV, MY; BEZUGLOV, NN; KLYCHAREV, AN.  
RYDBERG ATOMS IN ASTROPHYSICS  
NEW ASTRONOMY REVIEWS 53(7-10), 259-265 (2009)
57. KARITSKAYA, EA; BOCHKAREV, NG; HUBRIG, S; GNEDIN, YN; POGODIN, MA; YUDIN, RV; AGAFONOV, MI; SHAROVA, OI.  
THE MAGNETIC FIELD IN THE X-RAY BINARY CYG X-1  
COSMIC MAGNETIC FIELDS: FROM PLANETS, TO STARS AND GALAXIES (259), 137-+ (2009)
58. KISELEV, AA; GNEDIN, YN; SHAKHT, NA; GROSHEVA, EA; PIOTROVICH, MY; NATSVLISHVILI, TM.  
BLACK HOLE AT THE CENTER OF THE GLOBULAR CLUSTER M15: ESTIMATION OF THE MASS AND SPECIFIC ANGULAR MOMENTUM  
ASTRONOMY LETTERS-A JOURNAL OF ASTRONOMY AND SPACE ASTROPHYSICS 34(8), 529-536 (2008)
59. SILANT'EV, NA; GNEDIN, YN.  
POLARIZATION OF RADIATION OF POINT-LIKE SOURCE REFLECTED FROM TURBULENT MAGNETIZED ATMOSPHERE  
ASTRONOMY & ASTROPHYSICS 481(1), 217-228 (2008)
60. PIOTROVICH, MY; GNEDIN, YN; NATSVLISHVILI, TM.  
CAN THE INTRINSIC POLARIZATION OF STELLAR RADIATION CORRESPOND TO THE SERKOWSKI LAW?  
ASTRONOMY LETTERS-A JOURNAL OF ASTRONOMY AND SPACE ASTROPHYSICS 34(1), 28-32 (2008)
61. GNEDIN, YN; LARIONOV, VM; KONSTANTINOVA, TS; KOPATSKAYA, EN.  
POLARIZATION OF RADIATION FROM SUPERNOVA 2005CS AND POSSIBLE PHYSICAL MECHANISMS OF ITS GENERATION  
ASTRONOMY LETTERS-A JOURNAL OF ASTRONOMY AND SPACE ASTROPHYSICS 33(11), 736-739 (2007)
62. GNEDIN, YN; IPATOV, AV; PIOTROVICH, MY; FINKEL'SHTEIN, AM; KHARINOV, MA.  
RADIO EMISSION OF THE MAGNETAR SGR 1806-20: EVOLUTION OF THE MAGNETIC FIELD IN THE REGION OF

THE RADIO AFTERGLOW

ASTRONOMY REPORTS 51(10), 863-868 (2007)

63. KISSELEV, AA; GNEDIN, YN; GROSHEVA, EA; SHAKHT, NA; GORSHANOV, DL; PIOTROVICH, MY.  
THE SUPERMASSIVE BLACK HOLE AT THE CENTER OF OUR GALAXY: DETERMINATION OF ITS MAIN PHYSICAL PARAMETERS  
ASTRONOMY REPORTS 51(2), 100-108 (2007)
64. GNEDIN, YN; PIOTROVICH, MY; NATSVLISHVILI, TM.  
PVLAS EXPERIMENT: SOME ASTROPHYSICAL CONSEQUENCES  
MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY 374(1), 276-281 (2007)
65. GNEDIN, YN; IKHSANOV, RN; MILETSKY, EV.  
ON THE LONG-PERIOD VARIATIONS AND MAGNITUDE OF THE SOLAR NEUTRINO FLUX  
ASTRONOMY LETTERS-A JOURNAL OF ASTRONOMY AND SPACE ASTROPHYSICS 33(1), 45-53 (2007)
66. BYCHKOVA, VS; KARDASHEV, NS; BOLDYCHEVA, AV; GNEDIN, YN; MASLENNIKOV, KL.  
THE UNIQUE BL LAC OBJECT S5 0716+714  
ASTRONOMY REPORTS 50(10), 802-808 (2006)
67. SOKOLOV, VV; BISNOVATYI-KOGAN, GS; KURT, VG; GNEDIN, YN; BARYSHEV, YV.  
OBSERVATIONAL CONSTRAINTS ON THE ANGULAR AND SPECTRAL DISTRIBUTIONS OF PHOTONS IN GAMMA-RAY BURST SOURCES  
ASTRONOMY REPORTS 50(8), 612-625 (2006)
68. GNEDIN, YN; BORISOV, NV; LARIONOV, VM; NATSVLISHVILI, TM; PIOTROVICH, MY; ARKHAROV, AA.  
SPECTROPOLARIMETRY AND IR PHOTOMETRY OF MAGNETIC WHITE DWARFS: VACUUM POLARIZATION OR RYDBERG STATES IN THEIR MAGNETIC FIELDS?  
ASTRONOMY REPORTS 50(7), 553-561 (2006)
69. GNEDIN, YN; PIOTROVICH, MY.  
MAGNETIC FIELDS OF EXTRAGALACTIC RADIO SOURCES: TESTING COSMOLOGICAL MODELS (VOL 32, PG 215, 2006)  
ASTRONOMY LETTERS-A JOURNAL OF ASTRONOMY AND SPACE ASTROPHYSICS 32(6), 431-431 (2006)
70. ANTONOV, VA; BARANOV, AS; GNEDIN, YN.  
EFFECTS OF RANDOM SOLAR-WIND VARIATIONS IN THE MOTION OF SMALL PARTICLES IN THE SOLAR SYSTEM  
SOLAR SYSTEM RESEARCH 40(3), 251-257 (2006)
71. GNEDIN, YN; SOLOV'EV, AA; AVAKYAN, SV.  
SPACE SOLAR PATROL AND SOME FUNDAMENTAL QUESTIONS OF ASTROPHYSICS, SOLAR PHYSICS, AND GEOPHYSICS  
JOURNAL OF OPTICAL TECHNOLOGY 73(4), 218-221 (2006)
72. GNEDIN, YN; PIOTROVICH, MY.  
MAGNETIC FIELDS OF EXTRAGALACTIC RADIO SOURCES: TESTING COSMOLOGICAL MODELS  
ASTRONOMY LETTERS-A JOURNAL OF ASTRONOMY AND SPACE ASTROPHYSICS 32(4), 215-220 (2006)
73. GNEDIN, YN; SILANT'EV, NA; PIOTROVICH, MY.  
POLARIZATION OF THE RADIATION SCATTERED IN CONICAL MAGNETIZED ENVELOPES  
ASTRONOMY LETTERS-A JOURNAL OF ASTRONOMY AND SPACE ASTROPHYSICS 32(2), 96-109 (2006)
74. GNEDIN, YN; SILANT'EV, NA; SHTERNIN, PS.  
POLARIZATION OF RADIATION FROM A STRONGLY MAGNETIZED ACCRETION DISK: THE ASYMPTOTIC SPECTRAL DISTRIBUTION  
ASTRONOMY LETTERS-A JOURNAL OF ASTRONOMY AND SPACE ASTROPHYSICS 32(1), 39-44 (2006)
75. GNEDIN, YN.  
THE SUN AS A PHYSICAL LABORATORY FOR SEARCHING FOR PARTICLES OF DARK MATTER  
JOURNAL OF OPTICAL TECHNOLOGY 72(8), 592-601 (2005)
76. CHEREPASHCHUK, AM; SUNYAEV, RA; FABRIKA, SN; POSTNOV, KA; MOLKOV, SV; BARSUKOVA, EA; ANTOKHINA, EA; IRSMAMBETOVA, TR; PANCHENKO, IE; SEIFINA, EV; SHAKURA, NI; TIMOKHIN, AN; BIKMAEV, IF; SAKHIBULLIN, NA; ASLAN, Z; KHAMITOV, I; PRAMSKY, AG; SHOLUKHOVA, O; GNEDIN, YN; ARKHAROV, AA; LARIONOV, VM.  
INTEGRAL OBSERVATIONS OF SS433: RESULTS OF A COORDINATED CAMPAIGN  
ASTRONOMY & ASTROPHYSICS 437(2), 561-573 (2005)
77. GNEDIN, YN; SILANT'EV, NA; PIOTROVICH, MY; POGODIN, AA.  
POLARIZATION EFFECTS IN THE RADIATION OF MAGNETIZED ENVELOPES AND EXTENDED ACCRETION STRUCTURES  
ASTRONOMY REPORTS 49(3), 179-189 (2005)

78. GNEDIN, YU.N.; NATSVLISHVILI, T.M.; PIOTROVICH, M.YU..  
MAGNITNYE POLYA AKTIVNYH GALAKTICHESKIH YADER I KOSMOLOGICHESKIE MODELI  
GRAVITATION & COSMOLOGY 11(4), 333 (2005)
79. FINKELSTEIN, AM; IPATOV, AV; GNEDIN, YN; IVANOV, DV; KHARINOV, MA; RAKHIMOV, IA.  
OBSERVATIONS OF RADIO EMISSION FROM THE COSMIC GAMMA-RAY BURST GRB 030329  
ASTRONOMY LETTERS-A JOURNAL OF ASTRONOMY AND SPACE ASTROPHYSICS 30(6), 368-375 (2004)
80. CHEREPASHCHUK, AM; SUNYAEV, RA; FABRIKA, SN; MOLKOV, SV; BARSUKOVA, EA; ANTOKHINA, EA;  
IRSMAMBETOVA, TR; PANCHENKO, IE; POSTNOV, KA; SEIFINA, EV; SHAKURA, NI; TIMOKHIN, AN; BIKMAEV, IF;  
SAKHIBULLIN, NA; GNEDIN, YN; ARKHAROV, AA; LARIONOV, VM.  
COORDINATED INTEGRAL AND OPTICAL OBSERVATIONS OF SS433  
PROCEEDINGS OF THE 5TH INTEGRAL WORKSHOP ON THE INTEGRAL UNIVERSE (ESA SP-552). 16-20  
FEBRUARY 2004, MUNICH, GERMANY, 552, 207-214 (2004)
81. SHTERNIN, PS; GNEDIN, YN; SILANT'EV, NA.  
SOLUTION OF THE MILNE PROBLEM FOR A MAGNETIZED ATMOSPHERE  
ASTROPHYSICS 46(3), 350-360 (2003)
82. ANTONOV, VA; BARANOV, AS; GNEDIN, YN.  
JOINT CONSEQUENCES OF THE POYNTING-ROBERTSON EFFECT AND PLANETARY PERTURBATIONS IN THE  
RESTRICTED PLANE CIRCULAR THREE-BODY PROBLEM  
SOLAR SYSTEM RESEARCH 37(3), 238-242 (2003)
83. GNEDIN, YN.  
CURRENT STATUS OF MODERN DARK MATTER PROBLEM  
INTERNATIONAL JOURNAL OF MODERN PHYSICS A 17(29), 4251-4260 (2002)
84. DI CARLO, E; MASSI, F; VALENTINI, G; DI PAOLA, A; D'ALESSIO, F; BROCATO, E; GUIDUBALDI, D; DOLCI, M;  
PEDICHINI, F; SPEZIALI, R; LI CAUSI, G; GARATTI, ACO; CAPPELLARO, E; TURATTO, M; ARKHAROV, AA; GNEDIN,  
Y; LARIONOV, VM; BENETTI, S; PASTORELLO, A; ARETXAGA, I; CHAVUSHYAN, V; VEGA, O; DANZIGER, IJ;  
TORNAMBE, A.  
OPTICAL AND INFRARED OBSERVATIONS OF THE SUPERNOVA SN 1999E1  
ASTROPHYSICAL JOURNAL 573(1), 144-156 (2002)
85. GNEDIN, YN; SILANT'EV, NA.  
MAGNETIC FIELDS OF ACTIVE GALACTIC NUCLEI AND QUASARS: REDSHIFT DEPENDENCE  
ASTRONOMY LETTERS-A JOURNAL OF ASTRONOMY AND SPACE ASTROPHYSICS 28(7), 438-442 (2002)
86. ABALAKIN, VK; ARKHAROV, AA; GNEDIN, YN; KANAYEV, II; POLOJENTSEV, DD; POTTER, HI.  
THE ROLE OF THE CENTRAL (PULKOVO) OBSERVATORY IN SOUTHERN HEMISPHERE STAR OBSERVATIONS  
HIGHLIGHTS OF ASTRONOMY, VOL 12 12, 354-355 (2002)
87. ANTONOV, VA; BARANOV, AS; GNEDIN, YN.  
CONCERNING THE ELECTROMAGNETIC INSTABILITY OF A HOMOGENEOUS ANISOTROPIC PLASMA  
TECHNICAL PHYSICS 47(7), 856-861 (2002)
88. GNEDIN, YN; KIIKOV, SO.  
NEW GENERATION MECHANISMS FOR X-RAY QUASI-PERIODIC OSCILLATIONS IN ACCRETING NEUTRON STARS  
ASTRONOMY LETTERS-A JOURNAL OF ASTRONOMY AND SPACE ASTROPHYSICS 27(8), 507-515 (2001)
89. GNEDIN, YN; KISELEV, AA; KISELEVA, TP; MASLENNIKOV, KL.  
PHOTOGRAPHIC OBSERVATIONS OF COMET HALE-BOPP AT THE PULKOVO OBSERVATORY: THE DETECTION OF  
DUST ENVELOPES  
ASTRONOMY LETTERS-A JOURNAL OF ASTRONOMY AND SPACE ASTROPHYSICS 27(4), 249-253 (2001)
90. GNEDIN, YU.N.; BORISOV, N.V.; NATSVLISHVILI, T.M.; PIOTROVICH, M.YU..  
SPECTROPOLARIMETRIC OBSERVATIONS OF THE UNIQUE WHITE DWARF GD 356 ON THE 6-M BTA  
ASTROPHYSICS 44(3), 321 (2001)
91. GNEDIN, YN; KIIKOV, SO.  
THE GAMMA-RAY BURST PHENOMENON TREATED AS THE COLLAPSE OF A QED MAGNETIZED VACUUM  
BUBBLE: ANALOGY WITH SONOLUMINESCENCE  
MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY 318(4), 1277-1280 (2000)
92. SILANT'EV, NA; GNEDIN, YN; KRYMSKI, TS.  
FARADAY ROTATION AND POLARIZATION OF LIGHT SCATTERED IN MAGNETIZED STELLAR WIND  
ASTRONOMY & ASTROPHYSICS 357(3), 1151-1156 (2000)
93. IMPEY, CD; BYCHKOV, V; TAPIA, S; GNEDIN, Y; PUSTILNIK, S.  
RAPID POLARIZATION VARIABILITY IN THE BL LACERTAE OBJECT S5 0716+714  
ASTRONOMICAL JOURNAL 119(4), 1542-1561 (2000)



94. GNEDIN, YN; NAGOVITSYN, YA; NATSVLISHVILI, TM.  
QUASI-PERIODIC BRIGHTNESS OSCILLATIONS OF THE DWARF NOVA SS CYG AND THEIR MAGNETIC ORIGIN  
ASTRONOMY REPORTS 43(7), 462-470 (1999)
95. GNEDIN, YN; DODONOV, SN; VLASYUK, VV; SPIRIDONOVA, OI; SHAKHVERDOV, AV.  
ASTRONOMICAL SEARCHES FOR AXIONS: OBSERVATIONS AT THE SAO 6-M TELESCOPE  
MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY 306(1), 117-121 (1999)
96. GNEDIN, YN; NATSVLISHVILI, TM; BYCHKOV, VD; ROMANENKO, VP.  
POLARIMETRIC OBSERVATIONS OF COMET HALE-BOPP  
ASTRONOMY LETTERS-A JOURNAL OF ASTRONOMY AND SPACE ASTROPHYSICS 25(3), 191-197 (1999)
97. PENNYPACKER, C; EBISUZAKI, T; HANDA, T; NUGENT, P; FRUCHTER, A; PAIN, R; ALDERING, G; HAMMER, F;  
GROOM, D; TAKAHASHI, Y; HADAWAY, J; GOOBAR, A; NOMOTO, K; ISAAC, M; GOLDBABER, G; PERLMUTTER,  
S; MACKENTY, J; BRANCH, D; TSIOPA, O; GNEDIN, Y; JOCHUM, J.  
A ONE-METER APERTURE WIDE-FIELD CAMERA FOR THE JAPANESE EXPOSURE MODULE ON SPACE STATION  
SPACE TECHNOLOGY AND APPLICATIONS INTERNATIONAL FORUM - 1999, PTS ONE AND TWO 458, 176-182  
(1999)
98. GNEDIN, YU. N..  
ASTRONOMICAL OBSERVATIONS OF THE COMET OF THE CENTURY: NEW AND UNEXPECTED RESULTS  
SOROS. OBRAZ. ZH. (6), 84 (1999)
99. MASLENNIKOV, KL; BYKOV, OP; GNEDIN, YN; ZHARIKOV, SV; L'VOV, IN; TIKHONOV, NA.  
BTA OBSERVATIONS OF OBJECTS FROM THE KUIPER BELT  
ASTRONOMY LETTERS-A JOURNAL OF ASTRONOMY AND SPACE ASTROPHYSICS 24(2), 180-184 (1998)
100. GNEDIN, YN.  
ASTRONOMICAL SEARCHES FOR NONBARYONIC DARK MATTER  
ASTROPHYSICS AND SPACE SCIENCE 252(1-2), 95-106 (1997)
101. GNEDIN, YN.  
RESONANCE MAGNETIC CONVERSION OF PHOTONS INTO MASSLESS AXIONS AND STRIKING FEATURE IN  
QUASAR POLARIZED LIGHT  
ASTROPHYSICS AND SPACE SCIENCE 249(1), 125-129 (1997)
102. GNEDIN, YN.  
CHROMOSPHERES, ACTIVITY AND MAGNETIC FIELDS  
FUNDAMENTAL STELLAR PROPERTIES: THE INTERACTION BETWEEN OBSERVATION AND THEORY (189), 245-  
252 (1997)
103. GNEDIN, Y.N..  
THE SKY IN X-RAYS AND GAMMA RAYS  
SOROS EDUC. J. 5, 74 (1997)
104. FORTOV, VE; IVANOV, MF; IVLEV, AV; GNEDIN, YN; KLUMOV, BA.  
COLLISION OF COMET SHOEMAKER-LEVY 9 WITH JUPITER: WHAT DID WE SEE  
USPEKHI FIZICHESKIKH NAUK 166(4), 391-422 (1996)
105. GNEDIN, YN; LOPEZ, ED.  
MAGNETIC POLARIMETRIC REFRACTION IN THE SOLAR CORONA  
SOLAR PHYSICS 164(1-2), 97-102 (1996)
106. GNEDIN, Y N.  
SEARCHING FOR MASSLESS AND LOW MASS AXIONS BY ASTRONOMICAL AND EXPERIMENTAL METHODS  
COMMENTS ON ASTROPHYSICS 18, 257 (1996)
107. GNEDIN, YN; NATSVLISHVILI, TM; SHTOL, VG; VALYAVIN, GG; SHAKHOVSKOI, NM.  
SS CYGNI - A WHITE-DWARF WITH A SUB-MEGAGAUSS MAGNETIC-FIELD  
ASTRONOMY LETTERS-A JOURNAL OF ASTRONOMY AND SPACE ASTROPHYSICS 21(1), 118-121 (1995)
108. BENEMANSKAYA, GV; LAPUSHKIN, MN; GNEDIN, YN; FRASER, GW.  
THE NATURE OF THE VECTORIAL PHOTOELECTRIC EFFECT IN THE THRESHOLD ENERGY REGION  
NUOVO CIMENTO DELLA SOCIETA ITALIANA DI FISICA D-CONDENSED MATTER ATOMIC MOLECULAR AND  
CHEMICAL PHYSICS FLUIDS PLASMAS BIOPHYSICS 16(6), 599-609 (1994)
109. GNEDIN, YN; KRASNIKOV, SV.  
DECAY OF ARIONS IN THE MAGNETIC-FIELD OF THE STARS AS AN ADDITIONAL SOURCE OF X-RAY-EMISSION  
ASTRONOMY LETTERS-A JOURNAL OF ASTRONOMY AND SPACE ASTROPHYSICS 20(1), 72-74 (1994)
110. GNEDIN, YN; KRASNIKOV, SV.  
POLARIMETRIC SEARCHING FOR GOLDSTONE BOSONS FROM AGNS  
NATURE OF COMPACT OBJECTS IN ACTIVE GALACTIC NUCLEI , 422-423 (1994)

111. GNEDIN, YN; KRASNIKOV, SV.  
POLARIC EFFECTS RELATED WITH DISCOVERING GOLDSTONE BOSONS IN STARS AND GALAXIES  
ZHURNAL EKSPERIMENTALNOI I TEORETICHESKOI FIZIKI 102(6), 1729-1738 (1992)
112. GNEDIN, YN; KISELEV, NN; POGODIN, MA; ROZENBUSH, AE; ROZENBUSH, VK.  
POLARIMETRIC INVESTIGATION OF EARLY-TYPE SOUTHERN OBJECTS WITH CIRCUMSTELLAR SHELLS -  
CLASSICAL AND PECULIAR BE-STARS  
SOVIET ASTRONOMY LETTERS 18(3), 182-187 (1992)
113. GNEDIN, YN; MASLENNIKOV, KL; ROZENBUSH, AE; ROZENBUSH, VK; ZALLES, RF.  
POLARIMETRIC STUDIES OF EARLY-TYPE SOUTHERN OBJECTS WITH CIRCUMSTELLAR SHELLS - SN-1987A IN  
1988-1989  
SOVIET ASTRONOMY LETTERS 18(3), 163-167 (1992)
114. BESKROVNAYA, NG; GNEDIN, YN; KISELEV, NN; POGODIN, MA; ROZENBUSH, AE; ROZENBUSH, VK; ZALLES, RF.  
POLARIMETRIC STUDY OF EARLY-TYPE SOUTHERN OBJECTS WITH CIRCUMSTELLAR ENVELOPES - THE X-RAY  
BINARY VELA X-1  
SOVIET ASTRONOMY LETTERS 18(3), 203-207 (1992)
115. AVERINTSEV, MB; DYACHKOV, AV; GOLYNSKAYA, IM; KURT, VG; MIZYAKINA, TA; SHAFER, EY; SHAMOLIN, VM;  
SMIRNOV, AS; TITARCHUK, LG; ZENCHENKO, VM; ASLANOV, A; KOPAEVA, IF; LYUTY, VM; SHEFFER, EK; YUDIN,  
BM; ZAYTZEVA, GV; GNEDIN, YN; KHOZOV, GV; LARIONOV, VM; GIOVANNELLI, F.  
SOME RESULTS ON THE PHYSICS OF ACCRETING X-RAY SOURCES (HER X-1 AND A-0535+26)  
VULCANO WORKSHOP 1990 : FRONTIER OBJECTS IN ASTROPHYSICS AND PARTICLE PHYSICS 28, 81-94 (1991)
116. GNEDIN, YN; IKHSANOV, NR.  
GENERATION OF ULTRAHIGH-ENERGY GAMMA-RAYS IN ACCRETING X-RAY PULSARS  
HIGH-ENERGY ASTROPHYSICS: AMERICAN AND SOVIET PERSPECTIVES , 144-152 (1991)
117. GNEDIN, Y.  
PARTICLE ASTROPHYSICS - EXPERIMENTS AND OBSERVATIONS IN SOLAR AND STELLAR PHYSICS  
VULCANO WORKSHOP 1990 : FRONTIER OBJECTS IN ASTROPHYSICS AND PARTICLE PHYSICS 28, 189-200  
(1991)
118. GNEDIN, YN; IKHSANOV, NR.  
GENERATION OF ULTRAHIGH ENERGY GAMMA-RAYS IN ACCRETING X-RAY PULSARS  
ASTRONOMICHESTKII ZHURNAL 67(6), 1165-1173 (1990)
119. GIOVANNELLI, F; BARTOLINI, C; GUARNIERI, A; PICCIONI, A; BURGER, M; VANDESSEL, EL; KURT, VG; SHEFFER,  
EK; DEMARTINO, D; WATERS, R; MARTINEZPAIS, IG; GNEDIN, YN; LARIONOV, VM; SHAKOVSKAYA, NI.  
14 YEARS OF MULTIFREQUENCY-COORDINATED OBSERVATIONS OF THE X-RAY/BE SYSTEM-A 0535+26/HDE-  
245770  
ASTROPHYSICS AND SPACE SCIENCE 169(1-2), 139-145 (1990)
120. GNEDIN, YN; BORISOV, NV; NATSVLISHVILI, TM.  
THE INTERMEDIATE POLAR V603 AQL  
SOVIET ASTRONOMY LETTERS 16(4), 272-275 (1990)
121. GNEDIN, YN.  
AXION DECAY IN A STRONG MAGNETIC-FIELD AND RADIO FLUXES FROM MAGNETIC WHITE-DWARFS  
ASTROPHYSICS AND SPACE SCIENCE 169(1-2), 271-274 (1990)
122. GIOVANNELLI, F; PERSI, P; DEMARTINO, D; BARTOLINI, C; GUARNIERI, A; PICCIONI, A; TEODORANI, M;  
BURGER, M; VANDESSEL, EL; KURT, VG; SHEFFER, EK; WATERS, LBFM; MARTINEZPAIS, IG; GNEDIN, YN;  
LARIONOV, VM; SHAKOVSKAYA, NI; DAPERGOLAS, A; KONTIZAS, E.  
MULTIFREQUENCY BEHAVIOR OF THE X-RAY/BE SYSTEM A0535+26/HDE 245770 AT THE PERIASTRON  
PASSAGE IN MARCH-APRIL 1989  
EVOLUTION IN ASTROPHYSICS: IUE ASTRONOMY IN THE ERA OF NEW SPACE MISSIONS 310, 379-381 (1990)
123. GNEDIN, YU.N..  
EFFECT OF VACUUM POLARIZATION IN A STRONG MAGNETIC FIELD AND SPECTRAL FEATURES OF X-RAY  
SOURCE EMISSION  
IN: HIGH RESOLUTION X-RAY SPECTROSCOPY OF COSMIC PLASMAS (A91-56280 24-90). CAMBRIDGE,  
ENGLAND AND NEW YORK, CAMBRIDGE UNIVERSITY PRESS, 78-84 (1990)
124. GNEDIN, YN; TSIOPA, OA.  
GYROSYNCHROTRON RADIATION IN X-RAY BINARIES WITH DISK ACCRETION  
SOVIET ASTRONOMY LETTERS 15(6), 478-481 (1989)

125. GNEDIN, YN; IKHSANOV, NR.  
A MECHANISM FOR GENERATING ENERGETIC PARTICLES AND PRODUCING CORONAE IN X-RAY BINARIES  
SOVIET ASTRONOMY LETTERS 15(5), 397-399 (1989)
126. GNEDIN, YN; ZAJTSEVA, GV; LARIONOV, VM; LYUTYJ, VM; KHOZOV, GV; SHEFFER, EK.  
PHOTOMETRIC BEHAVIOR AND THE ORBITAL PERIOD OF THE SYSTEM HDE-245770=A-0535+26  
ASTRONOMICHESKII ZHURNAL 65(6), 1196-1206 (1988)
127. VIDMACHENKO, AP; ARKHAROV, AA; GNEDIN, YN.  
4-COLOR PHOTOMETRY DURING THE DECLINE OF SUPERNOVA-1987A  
SOVIET ASTRONOMY LETTERS 14(4), 295-296 (1988)
128. VIDMACHENKO, AP; GNEDIN, YN; LARIONOV, VM; LARIONOVA, LV.  
POLARIMETRY OF SUPERNOVA-1987 A - OBSERVATIONS AND INTERPRETATION  
SOVIET ASTRONOMY LETTERS 14(3), 163-165 (1988)
129. GNEDIN, YN; REDKINA, NP; TARASOV, KV.  
INFLUENCE OF THE MAGNETIC-FIELD ON THE SPECTRUM OF LINEAR-POLARIZATION OF RADIATION OF T  
TAURI-TYPE STARS  
ASTRONOMICHESKII ZHURNAL 65(2), 366-380 (1988)
130. GNEDIN, Y.; LARIONOV, V.; LIUTYI, V.; ZAYTZEVA, G..  
OPTICAL AND INFRARED RADIATION FROM ACCRETION DISKS IN BE STAR X-RAY BINARIES  
CONFERENCE: PHYSICS OF COMPACT OBJECTS. PROCEEDINGS OF THE COSPAR/IAU SYMPOSIUM LOCATION:  
SOFIA, BULGARIA DATE: 13-18 JULY 1987 SPONSOR(S): COSPAR; IAU 8(2-3), 157 (1988)
131. VOIKHANSKAYA, NF; GNEDIN, YN; BORISOV, NV; NATSVLISHVILI, TM; FABRIKA, SN.  
EMISSION-LINE BEHAVIOR IN THE POLAR CW-1103+254  
SOVIET ASTRONOMY LETTERS 13(3), 203-205 (1987)
132. GNEDIN, YN; NATSVLISHVILI, TM.  
SOME NEW METHODS FOR SEEKING HOT GAS IN GLOBULAR-CLUSTERS  
SOVIET ASTRONOMY LETTERS 13(1), 43-44 (1987)
133. GNEDIN, YN; KIRYAN, VV; KRAT, AV; POGODIN, MA; TARASOV, AE.  
AN INFRARED PEAK IN HZ HERCULIS PRIOR TO X-RAY ECLIPSE  
SOVIET ASTRONOMY LETTERS 12(2), 123-125 (1986)
134. KARITSKAYA, EA; BOCHKAREV, NG; GNEDIN, YN.  
SOME OBSERVED MANIFESTATIONS OF THE ACTION OF THE CLOCK MECHANISM IN THE HER X-1 HZ HER  
SYSTEM  
ASTRONOMICHESKII ZHURNAL 63(5), 1001-1011 (1986)
135. GNEDIN, YN; REDKINA, NP.  
GAS DUST PLASMA IN THE ENVELOPES OF T-TAURI STARS  
SOVIET ASTRONOMY LETTERS 11(4), 215-218 (1985)
136. GNEDIN, YN; POGODIN, MA.  
THE MAGNETIC-FIELDS OF SOME HERBIG AE BE STARS  
SOVIET ASTRONOMY LETTERS 11(1), 15-18 (1985)
137. GOLINSKAYA, IM; KURT, VG; MIZIAKINA, TA; RUTKOVSKII, AI; SMIRNOV, AC; SHAMOLIN, VM; SHAFER, EY;  
SHEFFER, EK; GNEDIN, YN; KIRYAN, VV; KRAT, VA; KHOZOV, GV; LARIONOV, VM.  
FAST X-RAY AND IR VARIABILITY OF A-0535+262  
ASTROPHYSICS AND SPACE SCIENCE 115(2), 393-397 (1985)
138. GNEDIN, YN; NAGEL, W.  
CRITICAL LUMINOSITY OF A MAGNETIC NEUTRON STAR  
ASTRONOMY AND ASTROPHYSICS 138(2), 356-358 (1984)
139. GNEDIN, YN; REDKINA, NP.  
THE MAGNETIC-FIELD OF T-TAURI  
SOVIET ASTRONOMY LETTERS 10(4), 255-257 (1984)
140. GNEDIN, YN; SILANTEV, NA.  
THE APPEARANCE OF POLARIZATION IN RADIATION FROM HOT STARS DUE TO THE FARADAY-ROTATION  
EFFECT AS A POSSIBLE METHOD OF DETERMINING STELLAR MAGNETIC-FIELDS  
ASTROPHYSICS AND SPACE SCIENCE 102(2), 375-395 (1984)
141. GNEDIN, YN; KHOZOV, GV; LARIONOV, VM.  
VARIABLE INFRARED RADIATION FROM X-RAY SOURCES 4U0115+634 AND A0535+262  
ASTROPHYSICS AND SPACE SCIENCE 93(1), 207-211 (1983)

142. GNEDIN, YN; KHOZOV, GV; LARIONOV, VM.  
INFRARED VARIABILITY OF THE X-RAY BINARY A0535+262  
SOVIET ASTRONOMY LETTERS 8(6), 371-373 (1982)
143. VOIKHANSKAYA, NF; GNEDIN, YN.  
THE NOVALIKE STAR TT ARIETIS - A BINARY-SYSTEM WITH CONICAL ACCRETION  
SOVIET ASTRONOMY LETTERS 8(6), 393-395 (1982)
144. GNEDIN, YN; PAVLOV, GG; APPARAO, KV; CHITRE, SM.  
INFRARED-EMISSION FROM X-RAY SOURCES  
ASTROPHYSICS AND SPACE SCIENCE 76(1), 105-109 (1981)
145. GNEDIN, YU.N.; KHOZOV, G.V.; LARIONOV, V.M..  
INFRARED OBSERVATIONS OF GALACTIC X-RAY SOURCES  
PIS'MA V ASTRONOMICHESKIE ZHURNAL 7(8), 466 (1981)
146. GNEDIN, YU.N.; SILANT'EV, N..  
DETERMINATION OF MAGNETIC FIELD OF COMPACT THERMAL SOURCES VIA SPECTRUM OF LINEAR  
POLARIZATION OF THEIR RADIATION  
PIS'MA V ASTRONOMICHESKIE ZHURNAL 6(6), 344 (1980)
147. PAVLOV, GG; SHIBANOV, YA; GNEDIN, YN.  
INFLUENCE OF VACUUM POLARIZATION BY STRONG MAGNETIC-FIELD ON THE CYCLOTRON RADIATION OF A  
THERMAL PLASMA  
JETP LETTERS 30(2), 125 (1979)
148. GNEDIN, YN.  
POLARIZATION EFFECTS IN RADIATION OF AN ACCRETION DISK  
ASTRONOMICHESKII ZHURNAL 55(3), 564 (1978)
149. GNEDIN, YN; PAVLOV, GG; SHIBANOV, YA.  
INFLUENCE OF POLARIZATION OF VACUUM IN A MAGNETIC-FIELD ON PROPAGATION OF RADIATION IN A  
PLASMA  
JETP LETTERS 27(6), 305 (1978)
150. GNEDIN, YU.N.; PAVLOV, G.G.; SHIBANOV, YU.A..  
THE EFFECT OF VACUUM BIREFRINGENCE IN A MAGNETIC FIELD ON THE POLARIZATION AND BEAMING OF  
RADIATION OF X-RAY PULSARS  
PIS'MA V ASTRONOMICHESKIE ZHURNAL 4(5), 214 (1978)
151. GNEDIN, YU.N.; SILANT'EV, N.A..  
POLARIZATION EFFECTS IN THE EMISSION OF A DISK OF ACCRETING MATTER  
SOVIET ASTRONOMY 22(3), 325 (1978)
152. GNEDIN, Y.N.; SILANTIEV, N.A..  
X-RAY POLARIZATION MAGNETIZED ACCRETION DISK  
SOVIET ASTRON. LETT. 3, 258 (1977)
153. MITROFANOV, I.G.; PAVLOV, G.G.; GNEDIN, YU.N..  
ON THE NATURE OF AM HER (3U 1809+50)  
PIS'MA V ASTRONOMICHESKIE ZHURNAL 3(8), 341 (1977)
154. GNEDIN, YN; SILANTEV, NA; SHIBANOV, YA.  
EFFECTS OF ELLIPTICITY AND LINEAR POLARIZATION OF RADIATION FROM CLOSE BINARIES WITH X-RAY  
SOURCES  
ASTRONOMICHESKII ZHURNAL 53(5), 936 (1976)
155. GNEDIN, YU.N.; SILANT'EV, N.A..  
POLARIZED RADIATION FROM STARS WITH A NONUNIFORM SURFACE-BRIGHTNESS DISTRIBUTION  
SOVIET ASTRONOMY 20(2), 192 (1976)
156. GNEDIN, YN; SUNYAEV, RA.  
POLARIZATION OF OPTICAL AND X-RADIATION FROM COMPACT THERMAL SOURCES WITH MAGNETIC-FIELD  
ASTRONOMY & ASTROPHYSICS 36(3), 379 (1974)
157. GNEDIN, YN; PAVLOV, GG; TSYGAN, AI.  
PHOTOEFFECT IN STRONG MAGNETIC-FIELDS AND X-RAYS FROM NEUTRON STARS  
ZHURNAL EKSPERIMENTALNOI I TEORETICHESKOI FIZIKI 66(2), 421 (1974)
158. GNEDIN, YN; SUNYAEV, RA.  
BEAMING OF RADIATION FROM AN ACCRETING MAGNETIC NEUTRON STAR AND X-RAY PULSARS  
ASTRONOMY & ASTROPHYSICS 25(2), 233 (1973)

159. GNEDIN, YN; SYUNYAEV, RA.  
SCATTERING OF RADIATION BY THERMAL ELECTRONS IN A MAGNETIC-FIELD  
ZHURNAL EKSPERIMENTALNOI I TEORETICHESKOI FIZIKI 65(1), 102 (1973)
160. GNEDIN, YN; PAVLOV, GG.  
TRANSFER EQUATIONS FOR NORMAL WAVES AND RADIATION POLARIZATION IN AN ANISOTROPIC MEDIUM  
ZHURNAL EKSPERIMENTALNOI I TEORETICHESKOI FIZIKI 65(5), 1806 (1973)
161. GNEDIN, YN; SUNYAEV, RA.  
LUMINOSITY OF THERMAL X-RAY SOURCES WITH A STRONG MAGNETIC-FIELD  
MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY 162(1), 53 (1973)
162. GNEDIN, YU.N.; DOLGINOV, A.Z.; POTASHNIK, E.L.; SILANT'EV, N.A..  
POLARIZATION OF OPTICAL RADIATION SCATTERED IN AN ABSORBING MEDIUM [ASTROPHYSICAL OBJECTS]  
SOVIET ASTRONOMY 16(5), 809 (1973)
163. GNEDIN, YU.N.; DOLGINOV, A.Z.; SILANT'EV, N.A..  
POLARIZATION OF OPTICAL RADIATION OF STARS WITH NONSPHERICAL ATMOSPHERES AND ENVELOPES  
SOVIET ASTRONOMY 16(4), 567 (1973)
164. DOLGINOV, AZ; GNEDIN, YN; NOVIKOV, GG.  
NEUTRAL PARTICLE DISTRIBUTION IN A COMETARY HEAD  
PLANETARY AND SPACE SCIENCE 19(2), 143 (1971)
165. GNEDIN, YN; DOLGINOV, AZ; NOVIKOV, GG.  
PHYSICAL PROCESSES IN COMET HEADS  
SOVIET ASTRONOMY AJ USSR 14(4), 700 (1971)
166. GNEDIN, YU.N.; SHULOV, O.S..  
THE DISCOVERY OF VARIABLE CIRCULAR POLARIZATION IN THE LIGHT OF X-RAY STAR SCO X-1  
ASTROFIZIKA 7(4), 529 (1971)
167. GNEDIN, YN; DOLGINOV, AZ; SILANTEV, NA.  
INTENSITY AND POLARIZATION OF RADIATION MULTIPLY SCATTERED BY FREELY ORIENTED PARTICLES OR  
MEDIUM FLUCTUATIONS  
SOVIET PHYSICS JETP-USSR 30(3), 540 (1970)
168. DOLGINOV, AZ; GNEDIN, YN; SILANTEV, NA.  
PHOTON POLARIZATION AND FREQUENCY CHANGE IN MULTIPLE SCATTERING  
JOURNAL OF QUANTITATIVE SPECTROSCOPY & RADIATIVE TRANSFER 10(7), 707 (1970)
169. GNEDIN, YU.N.; DOLGINOV, A.Z.; SILANTIEV, N.A..  
POLARIZATION OF PARTICLES AND QUANTA SCATTERED BY THICK LAYERS OF MATTER  
ZHURNAL EKSPERIMENTAL'NOI I TEORETICHESKOI FIZIKI 58(2), 706 (1970)
170. GNEDIN, YN; DOLGINOV, AZ; TSYGAN, AI.  
THEORY OF MULTIPLE SCATTERING .3.  
SOVIET PHYSICS JETP-USSR 27(2), 267 (1968)
171. GNEDIN, YN; DOLGINOV, AZ.  
PARTICLE DISTRIBUTION IN A COMET HEAD  
SOVIET ASTRONOMY AJ USSR 10(1), 143 (1966)
172. DOLGINOV, AZ; GNEDIN, YN.  
A THEORY OF ATMOSPHERE OF A COMET  
ICARUS 5(1), 64 (1966)
173. GNEDIN, YN; DOLGINOV, AZ.  
THEORY OF MULTIPLE SCATTERING  
SOVIET PHYSICS JETP-USSR 18(3), 784 (1964)