

Малама Юрий Георгиевич



(23.11.1940 г. - 2014 г.)

Кандидат физико-математических наук, старший научный сотрудник Лаборатории физической газовой динамики ИПМех РАН, старший научный сотрудник Лаборатории межпланетной среды ИКИ РАН.

Список основных публикаций:

1. **CHALOV, SV; MALAMA, YG; ALEXASHOV, DB; IZMODENOV, VV.**
ACCELERATION OF INTERSTELLAR PICKUP PROTONS AT THE HELIOSPHERIC TERMINATION SHOCK: VOYAGER 1/2 ENERGETIC PROTON FLUXES IN THE INNER HELIOSHEATH
MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY 455(1), 431-437 (2016)
2. **CHALOV, SV; ALEXASHOV, DB; MALAMA, YG; IZMODENOV, VV.**
SHOCK-DRIFT ACCELERATION OF INTERSTELLAR PICKUP PROTONS AT THE SOLAR WIND TERMINATION SHOCK
23RD EUROPEAN COSMIC RAY SYMPOSIUM (AND 32ND RUSSIAN COSMIC RAY CONFERENCE) 409, - (2013)
3. **CHALOV, SV; ALEXASHOV, DB; MCCOMAS, D; IZMODENOV, VV; MALAMA, YG; SCHWADRON, N.**
SCATTER-FREE PICKUP IONS BEYOND THE HELIOPAUSE AS A MODEL FOR THE INTERSTELLAR BOUNDARY EXPLORER RIBBON
ASTROPHYSICAL JOURNAL LETTERS 716(2), L99-L102 (2010)
4. **QUEMERAIS, E; LALLEMENT, R; BERTAUX, JL; SANDEL, BR; IZMODENOV, V; MALAMA, Y.**
ULTRAVIOLET GLOW FROM THE HYDROGEN WALL
ASTROPHYSICAL JOURNAL 711(2), 1257-1262 (2010)
5. **IZMODENOV, VV; MALAMA, YG; RUDERMAN, MS; CHALOV, SV; ALEXASHOV, DB; KATUSHKINA, OA; PROVORNIKOVA, EA.**
KINETIC-GASDYNAMIC MODELING OF THE HELIOSPHERIC INTERFACE
SPACE SCIENCE REVIEWS 146(1-4), 329-351 (2009)
6. **WOOD, B; IZMODENOV, V; MALAMA, Y.**
CONSTRAINTS ON THE STRUCTURE OF THE HELIOSPHERIC INTERFACE BASED ON LY ALPHA ABSORPTION SPECTRA
SPACE SCIENCE REVIEWS 143(1-4), 21-30 (2009)
7. **WOOD, BE; IZMODENOV, VV; MALAMA, YG.**
CONSTRAINTS ON THE STRUCTURE OF THE HELIOSPHERIC INTERFACE BASED ON LY ALPHA ABSORPTION SPECTRA

- FROM THE OUTER HELIOSPHERE TO THE LOCAL BUBBLE: COMPARISON OF NEW OBSERVATIONS WITH THEORY 31, 21-30 (2009)
8. PRYOR, W; GANGOPADHYAY, P; SANDEL, B; FORRESTER, T; QUEMERAIS, E; MOEBIUS, E; ESPOSITO, L; STEWART, I; MCCLINTOCK, W; JOUCHOUX, A; COLWELL, J; IZMODENOV, V; MALAMA, Y; TOBISKA, K; SHEMANSKY, D; AJELLO, J; HANSEN, C; BZOWSKI, M.
RADIATION TRANSPORT OF HELIOSPHERIC LYMAN-ALPHA FROM COMBINED CASSINI AND VOYAGER DATA SETS
ASTRONOMY & ASTROPHYSICS 491(1), 21-28 (2008)
 9. QUEMERAIS, E; IZMODENOV, V; KOUTROUMPA, D; MALAMA, Y.
TIME DEPENDENT MODEL OF THE INTERPLANETARY LYMAN ALPHA GLOW: APPLICATIONS TO THE SWAN DATA
ASTRONOMY & ASTROPHYSICS 488(1), 351-359 (2008)
 10. IZMODENOV, VV; MALAMA, YG; RUDERMAN, MS.
MODELING OF THE OUTER HELIOSPHERE WITH THE REALISTIC SOLAR CYCLE ADVANCES IN SPACE RESEARCH 41(2), 318-324 (2008)
 11. WOOD, BE; IZMODENOV, VV; LINSKY, JL; MALAMA, YG.
LY ALPHA ABSORPTION FROM HELIOSHEATH NEUTRALS
ASTROPHYSICAL JOURNAL 657(1), 609-617 (2007)
 12. CHALOV, SV; FAHR, HJ; MALAMA, YG.
UNEXPECTED SITES OF EFFICIENT STOCHASTIC ACCELERATION IN THE INNER HELIOSHEATH
ANNALES GEOPHYSICAE 25(3), 575-580 (2007)
 13. MALAMA, YG; IZMODENOV, VV; CHALOV, SV.
MODELING OF THE HELIOSPHERIC INTERFACE: MULTI-COMPONENT NATURE OF THE HELIOSPHERIC PLASMA
ASTRONOMY & ASTROPHYSICS 445(2), 693-701 (2006)
 14. IZMODENOV, V; MALAMA, Y; RUDERMAN, MS.
SOLAR CYCLE INFLUENCE ON THE INTERACTION OF THE SOLAR WIND WITH LOCAL INTERSTELLAR CLOUD
ASTRONOMY & ASTROPHYSICS 429(3), 1069-U17 (2005)
 15. MALAMA, YG; IZMODENOV, VV; CHALOV, SV.
MODELING OF THE HELIOSPHERIC INTERFACE: MULTI-COMPONENT NATURE OF THE HELIOSPHERIC PLASMA
PROCEEDINGS OF THE CONFERENCE SOLAR WIND 11 - SOHO 16: CONNECTING SUN AND HELIOSPHERE 592, 29-34 (2005)
 16. IZMODENOV, V; MALAMA, Y; GLOECKLER, G; GEISS, J.
FILTRATION OF INTERSTELLAR H, O, N ATOMS THROUGH THE HELIOSPHERIC INTERFACE: INFERENCES ON LOCAL INTERSTELLAR ABUNDANCES OF THE ELEMENTS
ASTRONOMY & ASTROPHYSICS 414(3), L29-L32 (2004)
 17. IZMODENOV, V; MALAMA, YG.
VARIATIONS OF INTERSTELLAR H ATOM PARAMETERS IN THE OUTER HELIOSPHERE: SOLAR CYCLE EFFECTS
TO THE EDGE OF THE SOLAR SYSTEM AND BEYOND 34(1), 74-78 (2004)
 18. IZMODENOV, VV; MALAMA, YG.
KINETIC MODELING OF THE H ATOMS IN THE HELIOSPHERIC INTERFACE: SOLAR CYCLE EFFECTS
PHYSICS OF THE OUTER HELIOSPHERE 719, 47-52 (2004)
 19. IZMODENOV, V; MALAMA, YG; GLOECKLER, G; GEISS, J.
EFFECTS OF INTERSTELLAR AND SOLAR WIND IONIZED HELIUM ON THE INTERACTION OF THE SOLAR WIND WITH THE LOCAL INTERSTELLAR MEDIUM
ASTROPHYSICAL JOURNAL 594(1), L59-L62 (2003)

20. IZMODENOV, V; GLOECKLER, G; MALAMA, Y.
WHEN WILL VOYAGER 1 AND 2 CROSS THE TERMINATION SHOCK?
GEOPHYSICAL RESEARCH LETTERS 30(7), - (2003)
21. IZMODENOV, VV; GRUNTMAN, M; MALAMA, YG.
INTERSTELLAR HYDROGEN ATOM DISTRIBUTION FUNCTION IN THE OUTER
HELIOSPHERE
JOURNAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS 106(A6), 10681-10689
(2001)
22. KESTENBOIM, C; HORNUNG, K; MALAMA, YU.
NUMERICAL SIMULATION OF THE HYPERVELOCITY IMPACT OF A COSMIC
DUST PARTICLE ON A BARRIER
FLUID DYN 36(5), 719 (2001)
23. IZMODENOV, VV; MALAMA, YG; KALININ, AP; GRUNTMAN, M;
LALLEMENT, R; RODIONOVA, IP.
HOT NEUTRAL H IN THE HELIOSPHERE: ELASTIC H-H, H-P COLLISIONS
ASTROPHYSICS AND SPACE SCIENCE 274(1-2), 71-76 (2000)
24. HORNUNG, K; MALAMA, YG; KESTENBOIM, KS.
IMPACT VAPORIZATION AND IONIZATION OF COSMIC DUST PARTICLES
ASTROPHYSICS AND SPACE SCIENCE 274(1-2), 355-363 (2000)
25. IZMODENOV, VV; GEISS, J; LALLEMENT, R; GLOECKLER, G; BARANOV,
VB; MALAMA, YG.
FILTRATION OF INTERSTELLAR HYDROGEN IN THE TWO-SHOCK
HELIOSPHERIC INTERFACE: INFERENCES ON THE LOCAL INTERSTELLAR
CLOUD ELECTRON DENSITY
JOURNAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS 104(A3), 4731-4741
(1999)
26. IZMODENOV, VV; LALLEMENT, R; MALAMA, YG.
HELIOSPHERIC AND ASTROSPHERIC HYDROGEN ABSORPTION TOWARDS
SIRIUS: NO NEED FOR INTERSTELLAR HOT GAS
ASTRONOMY & ASTROPHYSICS 342(1), L13-L16 (1999)
27. IZMODENOV, VV; LALLEMENT, R; MALAMA, YG.
HELIOSPHERIC INTERFACE FILTRATION OF THE INTERSTELLAR HYDROGEN
SOLAR WIND NINE 471, 803-806 (1999)
28. BARANOV, VB; IZMODENOV, VV; MALAMA, YG.
ON THE DISTRIBUTION FUNCTION OF H ATOMS IN THE PROBLEM OF THE
SOLAR WIND INTERACTION WITH THE LOCAL INTERSTELLAR MEDIUM
JOURNAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS 103(A5), 9575-9585
(1998)
29. IZMODENOV, V; MALAMA, YG; LALLEMENT, R.
INTERSTELLAR NEUTRAL OXYGEN IN A TWO-SHOCK HELIOSPHERE
ASTRONOMY & ASTROPHYSICS 317(1), 193-202 (1997)
30. BARANOV, VB; MALAMA, YG.
AXISYMMETRIC SELF-CONSISTENT MODEL OF THE SOLAR WIND
INTERACTION WITH THE LISM: BASIC RESULTS AND POSSIBLE WAYS OF
DEVELOPMENT
SPACE SCIENCE REVIEWS 78(1-2), 305-316 (1996)
31. QUEMERAIS, E; MALAMA, YG; SANDEL, BR; LALLEMENT, R; BERTAUX, JL;
BARANOV, VB.
OUTER HELIOSPHERE LYMAN ALPHA BACKGROUND DERIVED FROM TWO-
SHOCK MODEL HYDROGEN DISTRIBUTIONS: APPLICATION TO THE VOYAGER
UVS DATA
ASTRONOMY & ASTROPHYSICS 308(1), 279-289 (1996)
32. QUEMERAIS, E; MALAMA, YG; SANDEL, BR; LALLEMENT, R; BERTAUX, JL;
BARANOV, VB.
LYMAN ALPHA EMISSIONS IN THE OUTER HELIOSPHERE FROM VOYAGER
UVS DATA

SOLAR WIND EIGHT - PROCEEDINGS OF THE EIGHTH INTERNATIONAL SOLAR WIND CONFERENCE (382), 634-637 (1996)

33. **BARANOV, VB; MALAMA, YG.**
EFFECT OF LOCAL INTERSTELLAR-MEDIUM HYDROGEN FRACTIONAL IONIZATION ON THE DISTANT SOLAR-WIND AND INTERFACE REGION JOURNAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS 100(A8), 14755-14761 (1995)
34. **HORNUNG, K; MALAMA, YG; THOMA, K.**
MODELING OF THE VERY HIGH-VELOCITY IMPACT PROCESS WITH RESPECT TO IN-SITU IONIZATION MEASUREMENTS
IN-SITU IMPACT DETECTION TECHNIQUES, INTERPLANETARY DUST, AND FUTURE MARS EXPLORATION 17(12), 77-86 (1995)
35. **BARANOV, VB; MALAMA, YG.**
MODEL OF THE SOLAR-WIND INTERACTION WITH THE LOCAL INTERSTELLAR-MEDIUM - NUMERICAL-SOLUTION OF SELF-CONSISTENT PROBLEM
JOURNAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS 98(A9), 15157-15163 (1993)
36. **LALLEMENT, R; MALAMA, YG; QUEMERAIS, E; BERTAUX, JL; ZAITZEV, NA.**
INTERPLANETARY LYMAN-ALPHA SPECTRA AS A DIAGNOSTIC OF THE LOCAL INTERSTELLAR PLASMA-DENSITY - THE BARANOV 2-SHOCKS HELIOSPHERE CASE
ASTROPHYSICAL JOURNAL 396(2), 696-703 (1992)
37. **QUEMERAIS, E; MALAMA, YG; LALLEMENT, R; BERTAUX, JL.**
ON THE DETECTION OF HELIOSPHERIC INTERFACE PROPERTIES FROM INTERSTELLAR INTERPLANETARY LYMAN-ALPHA PROFILES - EXAMPLE OF BARANOV 2-SHOCK MODEL
SOLAR WIND SEVEN 3, 245-250 (1992)
38. **BARANOV, VB; LEBEDEV, MG; MALAMA, YG.**
THE INFLUENCE OF THE INTERFACE BETWEEN THE HELIOSPHERE AND THE LOCAL INTERSTELLAR-MEDIUM ON THE PENETRATION OF THE H-ATOMS TO THE SOLAR-SYSTEM
ASTROPHYSICAL JOURNAL 375(1), 347-351 (1991)
39. **MALAMA, YG.**
MONTE-CARLO SIMULATION OF NEUTRAL ATOMS TRAJECTORIES IN THE SOLAR-SYSTEM
ASTROPHYSICS AND SPACE SCIENCE 176(1), 21-46 (1991)
40. **MALAMA, YG.**
NUMERICAL MODELING OF THE HIGH-SPEED IMPACT FOR DIFFERENT RELATIONSHIPS BETWEEN THE IMPACTOR AND TARGET DENSITIES
COMBUSTION EXPLOSION AND SHOCK WAVES 20(4), 465-469 (1984)
41. **LEBEDEV, S.N.; MALAMA, YU.G.; OSIPOV, A.I..**
USE OF THE MONTE CARLO METHOD FOR DETERMINING THE NONEQUILIBRIUM ENERGY DISTRIBUTION IN THE TRANSLATIONAL DEGREES OF FREEDOM IN A ONE- COMPONENT REACTING SYSTEM
THEORETICAL AND EXPERIMENTAL CHEMISTRY 6(2), (1973)
42. **DENISIK, S.A.; LEBEDEV, S.N.; MALAMA, YU.G..**
TESTING A NONLINEAR SCHEME FOR THE MONTE CARLO METHOD
ZHURNAL VYCHISLITEL'NOI MATEMATIKI I MATEMATICHESKOI FIZIKI 11(3), (1971)
43. **DENISIK, S. A.; MALAMA, YU. G.; LEBEDEV, S. N.; POLAK, D. S..**
SOLUTION OF PROBLEM OF PHYSICAL AND CHEMICAL KINETICS BY THE MONTE CARLO METHOD
APPLICATION OF COMPUTATIONAL MATHEMATICS IN CHEMICAL AND PHYSICAL KINETICS , 179 (1969)