

Dr hab. Romana Ratkiewicz-Landowska  
Professor at the Institute of Aviation  
and the Space Research Center of the Polish Academy of Sciences  
e-mail romrat@ilot.edu.pl

#### LIST OF PUBLICATIONS JCR

1. **Grzedzielski, S., and R. Ratkiewicz,**  
Asymmetric Distant Solar Wind  
*Acta Astronomica* **25.3**, 177 - 204, 1975
2. **Jermakov, M.K., M.G. Lebedev, and R. Ratkiewicz**  
Asymmetry of the Solar Wind in a Two-shock Model of the Heliosphere  
*Acta Astronomica* **32.3-4**, 303 - 308, 1982
3. **Fahr, H.J., W.Neutsch, S.Grzedzielski, W.Macek, and R.Ratkiewicz**  
Plasma Transport Across the Heliopause  
*Space Science Reviews*, **43.3-4**, 329 - 381, 1986
4. **Fahr, H.J., R. Ratkiewicz, and S. Grzedzielski,**  
The Heliopause as a Pressure Equilibrium Surface Separating Two  
Counterflowing Magnetized Plasmas  
*Adv. Space Res.*, **Vol.6, No.1**, 389 - 392, 1986
5. **Fahr, H.J., S. Grzedzielski, and R. Ratkiewicz**  
Magnetohydrodynamic Modeling of the 3-dimensional Heliopause Us-  
ing the Newtonian Approximation  
*Annales Geophysicae* **6,(4)**, 337 - 354, 1988
6. **Banaszkiewicz, M., and R. Ratkiewicz**  
Possible Configurations of the Heliosphere under the Influence of the  
Outer Magnetic Field  
*Adv. Space Res.* **Vol.9, No.4**, 251 - 254, 1989
7. **Ratkiewicz, R., D. Rucinski, and W.-H. Ip**  
Estimates of the Fluxes of New-born He Ions due to Ionization of the  
Interstellar Helium Gas  
*A & A* **230**, 227 - 232, 1990
8. **Ratkiewicz, R.**  
An analytical solution for the heliopause boundary and its comparison  
with numerical solutions  
*A & A* **255, No 1/2**, 383 - 387, 1992
9. **Ratkiewicz, R.**  
Constraints in modelling the heliospheric interface  
*Adv. Space Res.* **Vol.13, No.6**, 179 - 184, 1993

10. **Scherer, K., H.J. Fahr, and R. Ratkiewicz**  
A stellar - interstellar counterflow configuration with transversal plasma compressibility  
*A & A* **287**, 219 - 226, 1994
11. **Ratkiewicz, R., W.I. Axford, and J.F. McKenzie**  
Similarity solutions for synchrotron emission in a Supernova blast wave  
*A & A* **291**, 935 - 942, 1994
12. **Ratkiewicz, R., D.E. Innes, and J.F. McKenzie**  
Characteristics and Riemann invariants for multi-ion plasmas in the presence of Alfvén waves  
*J. Plasma Phys.* **52**, part 2, 297 - 307, 1994
13. **Ratkiewicz, R., A. Barnes, G. A. Molvik, J. R. Spreiter, and S. S. Stahara,**  
Heliospheric termination shock motion due to fluctuations in the solar wind upstream conditions: Spherically symmetric model,  
*J. Geophys. Res.*, **101**, 27483–27497, 1996
14. **Czechowski, A., R. Ratkiewicz, J. F. McKenzie, W. I. Axford,**  
Generalized sonic points and acceleration of multi-ion solar wind  
*Adv. Space Res.*, **20**, No. 1, 43-46, 1997
15. **Ratkiewicz, R., A. Barnes, and J. R. Spreiter**  
Heliospheric Termination Shock Motion in Response to LISM variations: spherically symmetric model  
*Geophys. Res. Lett.*, **24**, No. 13, 1659-1662, 1997
16. **Czechowski, A., R. Ratkiewicz, J. F. McKenzie, W. I. Axford,**  
Heating and Acceleration of Minor Ions in the Solar Wind  
*A & A*, **335**, 303-308, 1998
17. **Ratkiewicz, R., A. Barnes, G. A. Molvik, J. R. Spreiter, S. S. Stahara, M. Vinokur, and S. Venkateswaran,**  
Effect of varying strength and orientation of local interstellar magnetic field on configuration of exterior heliosphere: 3D MHD simulation,  
*A & A*, **335**, 363-369, 1998
18. **Webb, G.M., R. Ratkiewicz, M. Brio, and G.P. Zank,**  
Multidimensional simple waves in gas dynamics  
*J. Plasma Physics*, **59**, part 3, 417-460, 1998
19. **Axford, W. I., J. F. McKenzie, G. V. Sukhorukova, M. Banaszkiewicz, A. Czechowski, and R. Ratkiewicz,**  
Acceleration of the high speed solar wind in coronal holes,  
*Space Sci Rev.*, **87**, 25-41, 1999
20. **Ben-Jaffel, L., O. Puyoo, and R. Ratkiewicz,**

- Far-ultraviolet echoes from the frontier between the solar wind and the local interstellar cloud,  
*Astrophys. J.*, **533**, 924-930, 2000
21. **Ratkiewicz, R., A. Barnes, and J. R. Spreiter**,  
 Local Interstellar Medium and Modelling the Heliosphere,  
*Journal Geophys. Res.*, **105**, 25,021-25,031, 2000
  22. **Ratkiewicz, R., and L. Ben-Jaffel**,  
 Effects of Interstellar Magnetic Field  $\vec{B}$  and Constant Flux of Neutral H on the Heliosphere  
*J. Geophys. Res.*, *107*, A1, pp **SSH 2** 1-13, 2002
  23. **Ratkiewicz, R., and G.M., Webb**,  
 On the Interaction of the Solar Wind with the Interstellar Medium: Field Aligned MHD Flow  
*J. Geophys. Res.*, *107*(A12), 1484, doi:10.1029/2001JA009163, 2002
  24. **Ratkiewicz, R., A. Barnes, H.-R. Müller, G.P. Zank, and G.M. Webb**,  
 Modeling the heliosphere: Influence of the interstellar magnetic field in the presence of LISM neutral hydrogen,  
*Adv. Space Res.*, *29*, No. 3, pp. 433-438, 2002
  25. **Ratkiewicz, R., and J.F. McKenzie**,  
 Interstellar magnetic field effects on the termination shock, heliopause and bow shock: aligned MHD flow  
*J. Geophys. Res.*, *108*(A2), 1071, doi:10.1029/2002JA009560, 2003
  26. **Ratkiewicz, R., and G.M., Webb**,  
 Reply to Comment on “On the Interaction of the Solar Wind with the Interstellar Medium: Field Aligned MHD Flow by R. Ratkiewicz and G.M. Webb” by N.V. Pogorelov and T. Matsuda  
*J. Geophys. Res.*, *109*, A02111, doi:10.1029/2003JA010085, 2004
  27. **Webb, G.M., G.P. Zank, E.K. Kagashvili, and R.E. Ratkiewicz**,  
 Magnetohydrodynamic Waves In Non-Uniform Flows I: A Variational Approach  
*J. Plasma Phys.*, *71*, 785-809, 2005
  28. **Webb, G.M., G.P. Zank, E.K. Kagashvili, and R.E. Ratkiewicz**,  
 Magnetohydrodynamic Waves In Non-Uniform Flows II: Stress Energy Tensors, Conservation Laws and Lie Symmetries  
*J. Plasma Phys.*, *71*, 811-857, 2005
  29. **Ratkiewicz, R., and J. Grygorczuk**,  
 Orientation of the Local Interstellar Magnetic Field Inferred from Voyagers Positions

- GRL*, 35, L23105, DOI:10.1029/2008GL036117, 2008
30. **A. Czechowski, M. Strumik, J. Grygorczuk, S. Grzedzielski, R. Ratkiewicz, and K. Scherer,**  
Structure of the heliospheric current sheet from plasma convection in time-dependent heliospheric models  
*A & A* 516, A17, doi:10.1051/0004-6361/200913542, 2010
  31. **Webb, G.M., G.P. Zank, R. H. Burrows, and R.E. Ratkiewicz,**  
Alfven Simple waves  
*J. Plasma Phys.*, doi:10.1017/S0022377809990596, 2010
  32. **J. Grygorczuk, R. Ratkiewicz, M. Strumik, and S. Grzedzielski**  
IBEX Ribbon: what could it tell about the local interstellar magnetic field?  
*ApJ*, 727, L48, 2011 doi: 10.1088/2041-8205/727/2/L48, 2011
  33. **M. Strumik, L. Ben-Jaffel, R. Ratkiewicz and J. Grygorczuk**  
Comparison of Heliospheric Models with Observations of the Voyager and IBEX Spacecraft  
*ApJ* 741 L6 (5pp), 2011
  34. **R. Ratkiewicz, M. Strumik, and J. Grygorczuk**  
The Effects of Local Interstellar Magnetic Field on Energetic Neutral Atom Sky Maps  
*ApJ* 756:3 (6pp), 2012
  35. **L. Ben-Jaffel, and R. Ratkiewicz**  
Uncovering the magnetic environment of our solar system  
*A & A* 546, A 78, 2012 doi: http://dx.doi.org/10.1051/0004-6361/201219637, 2012
  36. **L. Ben-Jaffel, M. Strumik, R. Ratkiewicz, and J. Grygorczuk**  
The Existence and Nature of the Interstellar Bow Shock  
*Astrophysical Journal*, 779:130 (7pp), 2013
  37. **M. Strumik, A. Czechowski, S. Grzedzielski, W. M. Macek, and R. Ratkiewicz**  
Small-Scale Local Phenomena Related to the Magnetic Reconnection and Turbulence in the Proximity of the Heliopause  
*Astrophysical Journal Letters*, 773:L23 (5pp), 2013
  38. **M. Strumik, A. Czechowski, S. Grzedzielski, W. M. Macek, and R. Ratkiewicz**  
Advective Transport of the Interstellar Plasma to the Heliosphere Across the Reconnecting Heliopause  
*ApJ* 782 L7 doi:10.1088/2041-8205/782/1/L7, 2014

LIST of PUBLICATIONS IN REFERRED PROCEEDINGS

39. **Grzedzielski, S., and R. Ratkiewicz,**  
Travelling Phenomena in the Heliosphere Induced by Solar Activity  
*Proceedings of Cospar Symposium B, Tel Aviv, June 1977, Air Force Geophysics Lab., Cambridge, USA, (eds. M.A. Shea, D.F. Smart and S.T. Wu), 127 - 135, 1977*
40. **Ratkiewicz, R., and S. Grzedzielski,**  
The Rayleigh-Taylor and Kelvin-Helmholtz Instabilities at the Heliopause  
*Artificial Satellites, Space Physics, No.4, 19.2, 29-40, 1984*
41. **Ratkiewicz, R., and M. Banaszekiewicz**  
An Attempt to construct a 3-dimensional Model of the Heliopause  
*Proceedings of the 4th International Workshop on Interaction of Neutral Gases with Plasma in Space, (Radziejowice, Poland, Sep.27-Oct.2, 1987), 29 - 33, 1988*
42. **Ratkiewicz, R.**  
MHD solar wind - interstellar plasma interaction: 3D formulation by the projected characteristics method and the stability analysis  
*Physics of the Outer Heliosphere, COSPAR Colloquia Vol.1, Pergamon Press, (eds. S. Grzedzielski and D.E. Page), 313 - 316, 1990*
43. **Ratkiewicz, R.**  
MHD modelling of the heliospheric interface  
*Solar Wind 7, COSPAR Colloquia Vol.3, Pergamon Press, (eds. E. Marsch and R. Schwenn), 251 - 254, 1992*
44. **Stahara, S.S., R. Ratkiewicz, and J.R. Spreiter**  
Global structure of the oncoming local interstellar plasma flow about a simplified heliopause interface  
*Solar Wind 7, COSPAR Colloquia Vol.3, Pergamon Press, (eds. E. Marsch and R. Schwenn), 277-280, 1992*
45. **Ratkiewicz, R., A. Barnes, and G. A. Molvik,**  
Global aspects of the motion of the heliospheric termination shock: A gasdynamic spherically symmetric model  
*Proceedings of the Eighth International Solar Wind Conference, Eds. D. Winterhalter, J. Gosling, S. Habbal, W. Kurth, and M. Neugebauer, American Institute of Physics, New York, 1996, Vol. 382, 646-649, 1996*
46. **Webb, G.M., R. Ratkiewicz, M. Brio, and G.P. Zank,**  
Multi-Dimensional MHD Simple Waves

- Proceedings of the Eighth International Solar Wind Conference, Eds. D. Winterhalter, J. Gosling, S. Habbal, W. Kurth, and M. Neugebauer, American Institute of Physics, New York, 1996, Vol. 382, 335–338, 1996*
47. **Czechowski, A., R. Ratkiewicz, J.F. McKenzie, W.I. Axford**  
 Minor Ions and Acceleration of the Fast Solar Wind  
*Plasma Astrophysics and Space Physics, Proceedings of the VIIth International Conference held in Lindau, May 4-8, 1998, Eds. J. Dyson and S.A. Lamb, Guest eds. J. Büchner, Sir Ian Axford, E. Marsch and V. Vasylunas , 593-598, 1999*
  48. **Ratkiewicz, R., and L. Ben-Jaffel,**  
 A new diagnosis tool to map the outer heliosphere regions,  
*COSPAR Colloquia Series, The Outer Heliosphere: The Next Frontiers, Potsdam, Germany, 24-28 July 2000, eds. K. Scherer, H. Fichtner, H-J. Fahr, E. Marsch, 11, pp. 285-287, 2001*
  49. **Ratkiewicz, R., L. Ben-Jaffel, J.F. McKenzie, and G.M., Webb,**  
 Interstellar magnetic field effects on the heliosphere  
*Solar Wind Ten, Proceedings of the Tenth International Solar Wind Conference, Pisa, Italy, 17-21 June, 2002, eds M. Velli, R. Bruno, and F. Malare, pp. 745-749, 2003*
  50. **Ratkiewicz, R., J. Grygorczuk, and L. Ben-Jaffel,**  
 Questions about effects of interplanetary and interstellar magnetic fields on the heliospheric interface  
*AIP Conference Proceedings of the IGPP-UCR 3rd Annual International Astrophysics Conference: Physics of the Outer Heliosphere, February 8-13, 2004, Riverside, California, 719, pp 93-98, 2004*
  51. **Ratkiewicz, R., J. Grygorczuk, and L. Ben-Jaffel,**  
 The Termination Shock and Beyond: MHD Modeling  
*AIP Conference Proceedings of the IGPP-UCR 4th Annual International Astrophysics Conference: The Physics of Collisionless Shocks, February 26-March 3, 2005, Palm Springs, California, 781, pp 294-298, 2005*
  52. **Ratkiewicz, R.,**  
 MHD modeling of the Heliosphere: a critical evaluation of different models  
*ASTRA (2006) 2, No. 1, 11-17, 2006*
  53. **Ratkiewicz, R., J. Grygorczuk, and L. Ben-Jaffel,**  
 The interaction between the heliospheric and interstellar magnetic fields at the heliopause

- AIP Conference Proceedings of the IGPP-UCR 5th Annual International Astrophysics Conference: The Physics of the Inner Heliosheath: Voyager Observations, Theory, and Future Prospects, March 3-9, 2006, Waikiki Beach, Oahu, Hawaii, 858, pp 27-32, 2006*
54. **G.M. Webb, G.P. Zank, E. Kh. Kaghashvili and R.E. Ratkiewicz,**  
MHD action principles and wave interactions in non-uniform flows  
*AIP Conference Proceedings of the IGPP-UCR 6th International Astrophysics Conference: Turbulence and nonlinear Processes in Astrophysical Plasmas, March 16-22, 2007, Oahu, Hawaii, 932, pp 400-405, 2007*
  55. **Ratkiewicz, R., L. Ben-Jaffel, and J. Grygorczuk,**  
What do we know about the orientation of the Local Interstellar Magnetic Field?  
*ASP ASTRONOM 2007, 2nd Intl C. on Numerical Modeling of Space Plasma Flows, Paris, France, June 11-15, 2007, 385 pp. 189-194, 2008*
  56. **R. Ratkiewicz, and J. Grygorczuk,**  
The local interstellar magnetic field predictions from the MHD model and VOYAGERS' data  
*12th International Solar Wind Conference, AIP Conference Proceedings 1216, pp 580-583, 2010*
  57. **J. Grygorczuk, and R. Ratkiewicz,**  
Time variations of the 3D heliosphere over a solar cycle  
*12th International Solar Wind Conference, AIP Conference Proceedings 1216, pp 695-698, 2010*
  58. **R. Ratkiewicz, J. Grygorczuk, and M. Strumik,**  
The SW-LISM interaction: modeling and observations  
*9th Annual International Astrophysics Conference Maui, Hawaii March 14-19, 2010, AIP Conference Proceedings, 2010*
  59. **R. Ratkiewicz, M. Strumik, J. Grygorczuk, and L. Ben-Jaffel**  
Interstellar Magnetic Field in the Nearest Surroundings of the Sun  
*The Astronomical Society of the Pacific Conference Series, 484, p.183*  
ISBN: 978-1-58381-852-7, e-Book ISBN: 978-1-58381-853-4, 2014

## LIST OF REPORTS

60. **Kijkowski, P., and R. Ratkiewicz,**  
On shock layer formed by solar wind and interstellar matter  
*Report SRC, Warsaw, Poland, 1978*
61. **Ratkiewicz, R.**  
MHD solar wind - interstellar plasma interaction: First steps towards  
numerical solution of this problem  
*Report SRC, Warsaw, Poland, 1991*
62. **Ratkiewicz, R.**  
MHD solar wind - interstellar plasma interaction: The initial conditions  
problem  
*Report SRC, Warsaw, Poland, 1992*
63. **Molvik, G. A., S. S. Stahara, J. R. Spreiter, M. Vinokur, and  
R. Ratkiewicz**  
Development of CDF Models for Solar Wind/Local Interstellar Medium  
Interaction  
*Final Report Ref. No. SST3988, 12.03.1996, 1996*
64. **Ratkiewicz, R.**  
A note on the MHD equation in primitive and conservative variable:  
eight-wave eigensystem  
*Report SRC, Warsaw, Poland, 2004*

## LIST OF ABSTRACTS

65. **R. Ratkiewicz,**  
Hydrodynamic theory of the solar wind - Nonsteady interaction with  
interstellar matter  
*Postepy Astronomii, vol. 25, Oct.-Dec. 1977, p. 257-261. In Polish,  
Abstract in English., 1977*
66. **Ratkiewicz, R., K. Scherer, and H. J. Fahr,**  
An Approximate Solution for the Circumsolar Flow Field of a Sun  
Moving Through the Local Interstellar Medium (LISM),  
*Supplement to EOS, Transactions, AGU, November 1, F523, 1994*
67. **Ratkiewicz, R., A. Barnes, and G. A. Molvik,**  
Global aspects of the motion of the heliospheric termination shock: A  
gasdynamic model



*NASA Ames Research Center, International Solar Wind 8 Conference, p. 108, 1995*

68. **Ratkiewicz, R., A. Barnes, and G. A. Molvik,**  
Computer Simulation of Motion of Heliospheric Termination Shock,  
*Supplement to EOS, Transactions, AGU, November 7, F459, 1995*
69. **Ratkiewicz, R., Barnes, A., Molvik, G. A., & Vinokur, M.**  
Effect of the Local Interstellar Magnetic Field on the Heliospheric Configuration,  
*Abstracts of 31<sup>st</sup> Scientific Assembly of COSPAR, 14-21 July, 1996, p. 295, 1996*
70. **Ratkiewicz, R., A. Barnes, G. A. Molvik, J. R. Spreiter, S. S. Stahara, M. Vinokur, and S. Venkateswaran,**  
Effect of the Local Interstellar Magnetic Field on the Heliospheric Configuration  
*Supplement to EOS, Transactions, AGU, 77, No. 46, F574, 1996*
71. **Webb, G.M., R. Ratkiewicz, and G.P. Zank,**  
Multi-dimensional Simple Waves in Gas Dynamics and Magnetohydrodynamics  
*Supplement to EOS, Transactions, AGU, 77, No. 46, F568, 1996*
72. **Czechowski, A., R. Ratkiewicz, J.F. McKenzie, W.I. Axford**  
Minor Ions and Acceleration of the Fast Solar Wind  
*Supplement to EOS, Transactions, AGU, 78, No. 18, F548, 1997*
73. **R. Ratkiewicz, A. Barnes, J.R. Spreiter, and S.S. Stahara**  
Asymmetry of Heliosphere Caused by LISM Magnetic Field in Presence of Neutral Particles  
*Supplement to EOS, Transactions, AGU, 78, No. 18, F532, 1997*
74. **Ratkiewicz, R., M. Hilchenbach, and K. C. Hsieh,**  
On the effect of the Local Interstellar Magnetic Field on the Heliospheric Configuration in View of HSENA Observations,  
*Supplement to EOS, Transactions, AGU, 79, No. 45, F707, 1998*
75. **Ben-Jaffel, L., O. Puyoo, and R. Ratkiewicz**  
Far UV Echoes from the Frontier Between the Solar Wind and the Local Interstellar Cloud  
*Supplement to EOS, Transactions, AGU, 80, No. 46, F792, 1999*
76. **Ratkiewicz, R., A. Barnes, and J. R. Spreiter,**  
Heliosphere Constrained by Various Configurations of LISM Magnetic Field  
*Supplement to EOS, Transactions, AGU, 80, No. 46, F792, 1999*
77. **Ratkiewicz, R., and L. Ben-Jaffel**

- LISM Magnetic Field and Neutrals Effects on the Structure of the Heliospheric Boundary,  
*Eos, Transactions, AGU, 82, No. 20, S311, 2001*
- 78. Ratkiewicz, R.,**  
 Interstellar Magnetic Field Effects on the Heliosphere in Presence of Neutral Particles  
*International Conference: Particle Transport and Acceleration in Cosmic Plasmas, February 9-13, 2002, University of California, Riverside, USA, Program and Abstract Book, organizers: Gary P. Zank and Jakobus A. le Roux, p. 22 , 2002*
- 79. Ratkiewicz, R., J.F. McKenzie, and L. Ben-Jaffel,**  
 Interstellar magnetic field effects on the heliosphere  
*SOLAR WIND 10 Conference Program and Abstract Book, eds Simone Landi and Marco Velli, p. 124 , 2002*
- 80. Ratkiewicz, R., W. Axford, T. Breus, and J.F. McKenzie,**  
 Polar Plumes and the Fast Solar Wind  
*SOLAR WIND 10 Conference Program and Abstract Book, eds Simone Landi and Marco Velli, p. 66 , 2002*
- 81. Grzedzielski, S., M. Bzowski, and R. Ratkiewicz,**  
 What may cause an off-apex flux of secondary neutrals?  
*EGS-AGU-EGU Joint Assembly, Abstracts from meeting held in Nice, France, 6-11 April, 2003, abstract # 5658, 2003*
- 82. Ratkiewicz, R., and L. Ben-Jaffel,**  
 Effects of interplanetary and interstellar magnetic fields on the heliospheric boundary  
*EGS-AGU-EGU Joint Assembly, Abstracts from meeting held in Nice, France, 6-11 April, 2003, abstract # 5606, 2003*
- 83. Webb, G.M., G.P. Zank, E.Kh. Khagashvili, and R. Ratkiewicz,**  
 A Variational Principle For MHD Waves In Non-Uniform Flows  
*AGU Fall Meeting Abstract Book, paper SH32D-02, 2003*
- 84. McKenzie, J.F., Webb, G.M., Zank, G.P., Kaghashvili, E. Kh., and R.E. Ratkiewicz**  
 Conservation Laws and Ponderomotive Force for Non-WKB MHD Waves in the Solar Wind, *Eos. Trans. AGU, 85 (47), Fall Meeting Suppl., Abstract SH31A-1173, p. F1497, 2004*
- 85. Ratkiewicz, R.,**  
 Questions About Effects of Interplanetary and Interstellar Magnetic Fields on the Heliospheric Interface  
*Program and Book of Abstracts of the IGPP-UCR 3rd Annual Inter-*

- national Astrophysics Conference: Physics of the Outer Heliosphere, Riverside, California, February 8-13, 2004 invited paper, p. 36, 2004*
86. **Ratkiewicz, R., J. Grygorczuk, and L. Ben-Jaffel,**  
The Termination Shock and Beyond: MHD Modeling  
*Program and Book of Abstracts of the IGPP-UCR 4th Annual International Astrophysics Conference: The Physics of Collisionless Shocks, February 26-March 3, 2005, Palm Springs, California, p. 37, 2005*
  87. **McKenzie, J.F., G.M. Webb, R.E. Ratkiewicz, and G.P. Zank,**  
Fluid Relabelling Symmetries and Lie Point Symmetries in MHD and Gas Dynamics  
*Supplement to EOS, Transactions, AGU, 87, No. 46, 2006*
  88. **Ratkiewicz, R., J. Grygorczuk, and L. Ben-Jaffel,**  
The interaction between the heliospheric and interstellar magnetic fields at the heliopause  
*Program and Book of Abstracts of the IGPP-UCR 5th Annual International Astrophysics Conference: The Physics of the Inner Heliosheath: Voyager Observations, Theory, and Future Prospects, March 3-9, 2006, Waikiki Beach, Oahu, Hawaii, p. 3, 2006*
  89. **Webb, G.M., C.M. Ko, R.E. Ratkiewicz, and G.P. Zank,**  
The Lagrangian Map and Lie Symmetries in MHD and Gas Dynamics  
*Supplement to EOS, Transactions, AGU, 88, No. 52, 2007*
  90. **G.M. Webb, G.P. Zank, E. Kh. Kaghshvili and R.E. Ratkiewicz,**  
MHD action principles and wave interactions in non-uniform flows  
*Program and Book of Abstracts of the IGPP-UCR 6th International Astrophysics Conference: Turbulence and nonlinear Processes in Astrophysical Plasmas, March 16-22, 2007, Oahu, Hawaii, 2007*
  91. **Ratkiewicz, R., L. Ben-Jaffel, and J. Grygorczuk,**  
The Local Interstellar Magnetic Field  
*Poster at 50 Anniversary of Cooperation between PAN and CNRS, Paris, France, October 25-26, 2007, 2007*
  92. **Grygorczuk, J., and R. Ratkiewicz,**  
The Heliosphere Interface in Different Models  
*Eos Trans.AGU,89(53),Fall Meet.Suppl., Abstract SH21B-1592, 2008*
  93. **Ratkiewicz, R., and J. Grygorczuk,**  
The Local Interstellar Magnetic Field: A View From Voyagers  
*Eos Trans.AGU,89(53),Fall Meet.Suppl., Abstract SH21B-1612, 2008*
  94. **J. Grygorczuk, and R. Ratkiewicz,**  
Time variations of the 3D heliosphere over a solar cycle  
*12th International Solar Wind Conference, Saint Malo, France, 21-26*

*June 2009, Book of abstracts, 2009*

95. **R. Ratkiewicz, and J. Grygorczuk,**  
The local interstellar magnetic field predictions from the MHD model and VOYAGERS' data  
*12th International Solar Wind Conference, Saint Malo, France, 21-26 June 2009, Book of abstracts, 2009*
96. **R. Ratkiewicz, J. Grygorczuk, and M. Strumik,**  
The SW-LISM interaction: Modeling and observations  
*9th Annual International Astrophysics Conference Maui, Hawaii March 14-19, 2010, Book of abstracts, 2010*
97. **J. Grygorczuk, M. Strumik, and R. Ratkiewicz,**  
The heliospheric interface: MHD modeling vs data  
*9th Annual International Astrophysics Conference Maui, Hawaii March 14-19, 2010, Book of abstracts, 2010*
98. **J. Grygorczuk, and R. Ratkiewicz,**  
The MHD modeling of the heliosphere verified by data  
*38th COSPAR Scientific Assembly 2010, 17-25 July 2010, Bremen, Germany, Book of abstracts, 2010*
99. **R. Ratkiewicz, J. Grygorczuk, and S. Grzedzielski,**  
Modeling and Observations of the SW-LISM Interaction  
*38th COSPAR Scientific Assembly 2010, 17-25 July 2010, Bremen, Germany, Book of abstracts, 2010*
100. **R. Ratkiewicz, S. Grzedzielski, M. Strumik, and J. Grygorczuk**  
LIMF direction inferred from the mechanism for IBEX ribbon generation based on SW-LIC interaction vs 2-3 kHz radio emission  
*2010 AGU Fall Meeting, December 13-17, 2010, San Francisco, California, USA, Book of abstracts, 2010*
101. **L. Ben-Jaffel, and R. Ratkiewicz**  
The Local Interstellar Medium Magnetic Field: Back to the Old Times!  
*American Geophysical Union, Fall Meeting 2011, abstract #SH23B-1965, 2011*
102. **R. Ratkiewicz, M. Strumik, and J. Grygorczuk**  
The Solar Wind-Local Interstellar Cloud Interaction: global modeling?  
*Intl Conference "From the Heliosphere into the Sun", Bad Honnef, Germany Jan 31 - 3 Feb 2012, Book of abstracts, 2012*
103. **R. Ratkiewicz, M. Strumik, and J. Grygorczuk**  
Studies of the heliosphere influenced by the local interstellar magnetic field based on Voyager and IBEX observations

*Intl Conference “Three Years of Observations with IBEX What did we learn about the Outer Heliosphere?”*, Bad Honnef, Germany, 28 - 31 March 2012, *Book of abstracts*, 2012

- 104. R. Ratkiewicz, M. Strumik, and J. Grygorczuk**  
Heliosphere LISM interaction: some aspects of MHD modeling  
*Team of J.R. Jokipii / E.C. Stone: Address the Physics of the Heliosphere Bern, Switzerland, 16 - 20 April 2012*, 2012
- 105. R. Ratkiewicz, M. Strumik, and J. Grygorczuk**  
Was it possible to predict the IBEX ribbon? and other related questions  
*Team of J.R. Jokipii / E.C. Stone: Address the Physics of the Heliosphere Bern, Switzerland, 6 - 9 November 2012*, 2012
- 106. M. Strumik, L. Ben-Jaffel, R. Ratkiewicz and J. Grygorczuk**  
Comparison of heliospheric models with observations of the Voyager and Ixex spacecraft  
*EGU General Assembly 2012, 22-27 April, 2012, Vienna, Austria p.9161*, 2012
- 107. R. Ratkiewicz, M. Strumik, and J. Grygorczuk**  
Looking for the agreement on a unique solution for the local interstellar magnetic field  
*Team of J.R. Jokipii / E.C. Stone: Address the Physics of the Heliosphere Bern, Switzerland, 21 - 24 May 2013*, 2013
- 108. A. Czechowski, J. Grygorczuk, R. Ratkiewicz, D. J. McComas**  
Strong Interstellar Field: Structure of the Heliosphere and Production of the Energetic Neutral Atoms  
*American Geophysical Union, Fall Meeting 2013, abstract # SH23C-2131* , 2013
- 109. R. Ratkiewicz, M. Strumik, J. Grygorczuk, and L. Ben-Jaffel**  
Interstellar magnetic field in the nearest surroundings of the Sun  
*12th Annual International Astrophysics Conference Myrtle Beach, SC, USA, 15 - 19 April 2013*, 2013
- 110. R. Ratkiewicz, M. Strumik, and J. Grygorczuk**  
Low Ram Pressure of the Solar Wind: Comparison of Global Modeling Results with Voyager and IBEX Observations  
*13th Annual International Astrophysics Conference Myrtle Beach, SC, USA, 0-14 March 2014*, 2014