

**Справка за минимални изисквани точки по групи показатели за
академичната длъжност „професор“**

Група от показатели А:

1. Име на дисертацията за образователната и научна степен „доктор“	точки
“Дву-Измерни Числени Магнито-Хидродинамични Модели на Експлозивни Събития на Слънцето”	50

A1. Roussev, I. I., K. Galsgaard, R. Erdélyi, and J. G. Doyle, Modeling of Explosive Events in the Solar Transition Region in a 2D Environment: Part I. General Reconnection Jet Dynamics, <i>Astronomy & Astrophysics</i> , 370 , 298, 2001. https://doi.org/10.1051/0004-6361:20010207			Q1	25
A2. Roussev, I. I., K. Galsgaard, R. Erdélyi, and J. G. Doyle, Modeling of Explosive Events in the Solar Transition Region in a 2D Environment: Part II. Various MHD Experiments, <i>Astronomy & Astrophysics</i> , 375 , 228, 2001. https://doi.org/10.1051/0004-6361:20010765			Q1	25
A3. Roussev, I. I., J. G. Doyle, K. Galsgaard, and R. Erdélyi, Modeling of Explosive Events in the Solar Transition Region in a 2D Environment: Part III. Observable Consequences, <i>Astronomy & Astrophysics</i> , 380 , 719, 2001. https://doi.org/10.1051/0004-6361:20011497			Q1	25
A4. Roussev, I. I., K. Galsgaard, and P. G. Judge, Physical Consequences of the Inclusion of Anomalous Resistivity in the Dynamics of 2D Magnetic Reconnection, <i>Astronomy & Astrophysics</i> , 382 , 639, 2002. https://doi.org/10.1051/0004-6361:20011645			Q1	25
A5. Galsgaard, K., and I. I. Roussev , Magnetic Reconnection in 2D Stratified Atmospheres: Part I. Dynamical Consequences, <i>Astronomy & Astrophysics</i> , 383 , 685, 2002. https://doi.org/10.1051/0004-6361:20011733			Q1	25
A6. Roussev, I. I., and K. Galsgaard, Magnetic Reconnection in 2D Stratified Atmospheres: Part II. Observational Consequences, <i>Astronomy & Astrophysics</i> , 383 , 697, 2002. https://doi.org/10.1051/0004-6361:20011734			Q1	25

Група от показатели В: минимум 100 т.

3. Монография	точки			т.
	100			
4. Статия	Q (WoS)	Q (Scopus)	SJR	т.
II-B1. <u>Roussev, I. I.</u> , N. Lugaz, and I. V. Sokolov, New Physical Insight on the Changes in Magnetic Topology during CMEs: Case Studies for the Apr 21 and Aug 24, 2002 Events, <i>Astrophysical Journal Letters</i> , 668 , L87, 2007. https://doi.org/10.1086/522588			Q1	25
II-B2. Downs, C., <u>I. I. Roussev</u> , B. van der Holst, N. Lugaz, I. V. Sokolov, and T. I. Gombosi, Toward a Realistic Thermodynamic Magnetohydrodynamic Model of the Global Solar Corona, <i>Astrophysical Journal</i> , 712 , 1,219, 2010. https://doi.org/10.1088/0004-637X/712/2/1219			Q1	25
II-B3. Downs, C., <u>I. I. Roussev</u> , B. van der Holst, N. Lugaz, and I. V. Sokolov, Understanding SDO/AIA Observations of the 2010 June 13 EUV Wave Event: Direct Insight from a Global Thermodynamic MHD Simulation, <i>Astrophysical Journal</i> , 750 , doi:10.1088/0004-637X/750/2/134, 2012. https://doi.org/10.1088/0004-637X/750/2/134			Q1	25
II-B4. <u>Roussev, I. I.</u> , K. Galsgaard, C. Downs, N. Lugaz, I. V. Sokolov, E. Moise, and J. Lin, Explaining Fast Ejections of Plasma and Exotic X-Ray Emission from the Solar Corona, <i>Nature Physics</i> , 8(11) , 845, doi: 10.1038/nphys2427, 2012. https://doi.org/10.1038/NPHYS2427			Q1	25
Общ брой точки В			100	

Група от показатели Г: минимум 220 т.

5. Монография (не хабилитационен труд)	точки			т.
	30			
6. Книга на базата на дисертация	точки			т.
	20			
7. Статия	Q (WoS)	Q (Scopus)	SJR	т.
II-Г1. Lugaz, N., A. Vourlidis, <u>I. I. Roussev</u> , C. Jacobs, W. B. Manchester IV, and O. Cohen, G. Tóth, and T. I. Gombosi, The Brightness of Density			Q1	25

Structures at Large Solar Elongation Angles: What Is Being Observed by STEREO/SECCHI?, <i>Astrophysical Journal Letters</i> , 684 , L111, 2008. https://doi.org/10.1086/592217				
II-Г2. Jacobs, C., I. I. Roussev , N. Lugaz, and S. Poedts, The Internal Structure of Coronal Mass Ejections: Are all Regular Magnetic Clouds Flux Ropes?, <i>Astrophysical Journal Letters</i> , 695 , L171, 2009. http://https/doi.org/10.1088/0004-637X/695/2/L171			Q1	25
II-Г3. Sokolov, I. V., I. I. Roussev , M. Skender, T. I. Gombosi, and A. V. Usmanov, Transport Equation for MHD Turbulence: Application to Particle Acceleration at Interplanetary Shocks, <i>Astrophysical Journal</i> , 696 , 261, 2009. https://doi.org/10.1088/0004-637X/696/1/261			Q1	25
II-Г4. Lugaz, N., A. Vourlidas, I. I. Roussev , and H. Morgan, Solar–Terrestrial Simulation in the STEREO Era: The 24 – 25 Jan 2007 Eruptions, <i>Solar Physics</i> , 256 , 269, 2009. https://doi.org/10.1007/s11207-009-9339-4			Q1	25
II-Г5. Downs, C., I. I. Roussev , B. van der Holst, N. Lugaz, I. V. Sokolov, and T. I. Gombosi, Studying EUV Wave Transients with a Digital Laboratory: Direct Comparison of EUV Wave Observations to Global MHD Simulations, <i>Astrophysical Journal</i> , 728 , 10.1088/0004-637X/728/1/2, 2011. https://doi.org/10.1088/0004-637X/728/1/2			Q1	25
II-Г6. Al-Haddad, N., I. I. Roussev , C. Moestl, C. Jacobs, N. Lugaz, and S. Poedts, On the Internal Structure of the Magnetic Field in Magnetic Clouds and Interplanetary Coronal Mass Ejections: Writhe versus Twist, <i>Astrophysical Journal Letters</i> , 738 , doi: 10.1088/2041-8205/738/2/L18, L18-L21, 2011. https://doi.org/10.1088/2041-8205/738/2/L18			Q1	25
II-Г7. Cohen, O., I. V. Sokolov, I. I. Roussev , C. N. Arge, W. B. Manchester IV, T. I. Gombosi, R. A. Frazin, H. Park, M. D. Butala, F. Kamalabadi, and M. Velli, A Semi-empirical Magnetohydrodynamical Model of the Solar Wind, <i>Astrophysical Journal Letters</i> , 654 , L163, 2007.			Q1	25

https://doi.org/10.1086/511154				
II-Г8. Cohen, O., I. V. Sokolov, I. I. Roussev , and T. I. Gombosi, Validation of a Synoptic Solar Wind Model, <i>Journal of Geophysical Research (Space Physics)</i> , 113 , doi: 10.1029/2007JA012797 , 2008. https://doi.org/10.1029/2007JA012797			Q1	25
II-Г9. Sokolov, I. V., B. van der Holst, R. Oran, C. Downs, I. I. Roussev , M. Jin, W. B. Manchester, R. Evans, and T. I. Gombosi, MHD Waves and Coronal Heating: Unifying Empirical and MHD Turbulence Models, <i>Astrophysical Journal</i> , 764 , 23, doi: 10.1088/0004-637X/764/1/23 , 2013. https://doi.org/10.1088/0004-637X/764/1/23			Q1	25
II-Г10. Ni, L., J. Lin, I. I. Roussev , and B. Schmieder, Heating Mechanisms in the Low Solar Atmosphere through Magnetic Reconnection in Current Sheets, <i>Astrophys. Journal</i> , 832 , doi: 10.3847/0004-637X/832/2/195 , 2016. https://doi.org/10.3847/0004-637X/832/2/19			Q1	25
II-Г11. Mei, Z. X., R. Keppens, I. I. Roussev , and J. Lin, Magnetic Reconnection during Eruptive Magnetic Flux Ropes, <i>Astronomy & Astrophysics Letters</i> , 604 , doi: 10.1051/0004-6361/201731146 , 2017. https://doi.org/10.1051/0004-6361/201731146			Q1	25
II-Г12. Mei, Z. X., R. Keppens, I. I. Roussev , and J. Lin, Parametric Study on Kink Instabilities of Twisted Magnetic Flux Ropes in the Solar Atmosphere, <i>Astronomy & Astrophysics</i> , 609 , doi: 10.1051/0004-6361/201730395 , Jan 2018. https://doi.org/10.1051/0004-6361/201730395			Q1	25
8. Глава от книга или монография	точки			т.
	15			
9. Призната заявка за полезен модел, патент или авторско свидетелство	точки			т.
	25			
10. Публикувана заявка за патент или полезен модел	точки			т.
	15			
Общ брой точки Г			300	

Група от показатели Д: минимум 120 т.

11. Цитирана статия	цитираща статия (в WoS/Scopus) – 2 т.	т.
Downs, C., <u>I. I. Roussev</u> , B. van der Holst, N. Lugaz, I. V. Sokolov, and T. I. Gombosi, Toward a Realistic Thermodynamic Magnetohydrodynamic Model of the Global Solar Corona, <i>Astrophysical Journal</i> , 712 , 1,219, 2010. https://doi.org/10.1088/0004-637X/712/2/1219	90	
Общ брой точки Д		180

Група от показатели Е: минимум 150 т.

12. Научна степен „доктор на науките“	точк и	т.
	75	
13. Ръководство на успешно защитил докторант	точк и	т.
1. Купър Даунс (Cooper Downs): https://www.proquest.com/docview/952709322?sourcetype=Dissertations%20&%20Theses	50/n	50
2. Нада Ал-Хадад (Nada Al-Haddad): https://wet.kuleuven.be/nieuwsbrief/nieuwsbrief50.pdf		50
14. Участие в национален проект	точк и	т.
	10	
15. Участие в международен проект	точк и	т.
	20	
1. Workshop: Development of an Integrated Understanding of the Sun-Earth System in Borovets, Bulgaria; September 12 - 16, 2011 Principal Investigator: <u>Roussev, Ilia</u> Co-Principal Investigators: Jordanova, Vania and Borovsky, Joseph Date: 2011 Grant Source: National Science Foundation (USA) The Principal Investigator will organize an international community workshop and symposium in Bulgaria to foster interdisciplinary research and education. This		20

symposium will be held during September 12-16, 2011, in the Bulgarian town of Borovets near the capital of Sofia.		
2. International Symposium on Recent Observations and Simulations of the Sun-Earth System (ISROSES); Varna, Bulgaria; September 18-22, 2006 Principal Investigator: Roussev, Ilia Co-Principal Investigator: Jordanova, Vania Date: 2006 Grant Source: National Science Foundation (USA) The principal investigator (PI) plans to organize an International Symposium on Recent Observations and Simulations of the Sun-Earth System (ISROSES) to be held in Varna, Bulgaria, from 18 to 22 September 2006.		20
16. Ръководство на национален проект	ТОЧК И	Т.
	20	
17. Ръководство на български екип в международен проект	ТОЧК И	Т.
	50	
18. Привлечени средства по проекти, ръководени от кандидата	ТОЧК И	Т.
	1 т. за всек и 5000 лв	
1. SHINE: Numerical Modeling of SHINE Campaign Events by Means of Coupled MHD–SEP Simulations, NSF Award # ATM–0454469, \$292,000 (2005 – 2008) https://www.nsf.gov/awardsearch/show-award?AWD_ID=0454469		97
2. International Symposium on Recent Observations and Simulations of the Sun–Earth System (ISROSES), NSF Award # ATM–0604536, \$30,000 (2006) https://www.nsf.gov/awardsearch/show-award?AWD_ID=0604536		10
3. FDSS: Solar and Space Science Development at the Institute for Astronomy, NSF Award # ATM–0456971, \$643,500 (2006 – 2011) https://www.nsf.gov/awardsearch/show-award?AWD_ID=0456971		213
4. CAREER: Bridging Modern Computational Capabilities and Observations of Solar Magnetic Fields with Expanding Solar Physics Education at the University of Hawai’i,		349

NSF Award # ATM-0639335, \$1,045,000 (2007 – 2012)		
https://www.nsf.gov/awardsearch/show-award?AWD_ID=0639335		
5. SHINE Workshop Coordination, NSF Award # AGS-1002454, \$788,000 (2010 – 2013)		263
https://www.nsf.gov/awardsearch/show-award?AWD_ID=1002454		
19. Публикуван университетски учебник или учебник, който се използва в училищната мрежа	точк и	т.
	40/n	
20. Публикувано университетско пособие или учебно пособие, което се използва в училищната мрежа	точк и	т.
	20/n	
Общ брой точки Е		107 2

Дата: 26.06.2026г.

Подпис:

Име и фамилия: Илия Янков Русев