Сведения по оппонентам и ведущей организации по диссертации Дедикова Святослава Юрьевича

Официальные оппоненты

ФИО: Зинченко Игорь Иванович.
Ученая степень: доктор физико-математических наук.
Специальность: 1.3.1 – Физика космоса, астрономия.
Название организации: ФИЦ «Институт прикладной физики им. А.В. Гапонова-Грехова Российской академии наук».
Должность: заведующий отделом.

Публикации И.И. Зинченко, близкие к теме диссертации С.Ю. Дедикова:

1. Zinchenko, I. I., Salii, S. V., Sobolev, A. M., Zaichikova, I. A., Liu, S. -Y., Su, Y. -N., "Submillimetre Class II methanol masers near the massive protostar S255IR NIRS 3: evolution and excitation of the J_1 - J_0 A^{-+} series and a new maser line at 345.919 GHz", *Monthly Notices of the Royal Astronomical Society*, vol. 543, no. 1, pp. L9–L13, 2025. doi: 10.1093/mnrasl/slaf086

2. Valé, G., Lara-López, M. A., Valerdi, M., Zinchenko, I., O'Sullivan, S. P., Pilyugin, L. S., et al., "Metal-THINGS: Gas metallicity gradients in nearby galaxies", *Astronomy & Astrophysics*, vol. 701, p. A226, 2025. doi: 10.1051/0004-6361/202553818

3. Hojaev, A. S., Zinchenko, I. I., "Possibilities for Studying Star-Formation Processes at IRAO "Suffa": Objects and Tasks", *Astrophysical Bulletin*, vol. 80, no. 1, pp. 140–161, 2025. doi: 10.1134/S1990341324601011

4. Pazukhin, A. G., Zinchenko, I. I., Trofimova, E. A., "Study of the Physical and Chemical Properties of Dense Clumps at Different Evolutionary Stages in Several Regions of Massive Star and Stellar Cluster Formation", *Astronomy Reports*, vol. 69, no. 2, pp. 87–102, 2025. doi: 10.1134/S1063772925701586

5. Zinchenko, I. I., Liu, S. -Y., Su, Y. -N., "Fine structure and kinematics of the ionized and molecular gas in the jet and disk around S255IR NIRS3 from high-resolution ALMA observations", *Astronomy & Astrophysics*, vol. 692, p. A181, 2024. doi: 10.1051/0004-6361/202452458

6. Zinchenko, I. I., "Accretion outbursts in massive young stellar objects", *INASAN Science Reports*, vol. 9, pp. 40–43, 2024. doi: 10.51194/INASAN.2024.9.2.002

7. Churazov, Eugene, Khabibullin, Ildar I., Bykov, Andrei M., Chugai, Nikolai N., Sunyaev, Rashid A., Utrobin, Victor P., Zinchenko, Igor I., "North Polar Spur: Gaseous plume(s) from star-forming regions ∼3–5 kpc from the Galactic Center?", *Astronomy & Astrophysics*, vol. 691, p. L22, 2024. doi: 10.1051/0004-6361/202451762

8. Trofimova, E. A., Zinchenko, I. I., Zemlyanukha, P. M., Thomasson, M., "A Survey of High-Mass Star Forming Regions in the Line of Singly Deuterated Ammonia NH_2D", *Astronomy Reports*, vol. 68, no. 8, pp. 771–789, 2024. doi: 10.1134/S1063772924700719

9. Bhadari, N. K., Dewangan, L. K., Pirogov, L. E., Pazukhin, A. G., Zinchenko, I. I., Maity, A. K., Sharma, Saurabh, "Fragmentation and dynamics of dense gas structures in the proximity of massive young stellar object W42-MME", *Monthly Notices of the Royal Astronomical Society*, vol. 526, no. 3, pp. 4402–4417, 2023. doi: 10.1093/mnras/stad2981

10. Mallick, Kshitiz K., Dewangan, Lokesh K., Ojha, Devendra K., Baug, Tapas, Zinchenko, Igor I., "Structure and Kinematics of Sh2-138-A Distant Hub-filament System in the Outer Galactic Plane", *The Astrophysical Journal*, vol. 944, no. 2, p. 228, 2023. doi: 10.3847/1538-4357/acb8bc

11. Zinchenko, I. I., "Observational studies of high-mass star formation", *Astronomical and Astrophysical Transactions*, vol. 33, no. 4, pp. 355–376, 2023. doi: 10.48550/arXiv.2211.15586

12. Zemlyanukha, Petr, Zinchenko, Igor I., Dombek, Evgeny, Pirogov, Lev E., Topchieva, Anastasiia, Joncas, Gilles, et al., "Fragmented atomic shell around S187 H II region and its interaction with molecular and ionized gas", *Monthly Notices of the Royal Astronomical Society*, vol. 515, no. 2, pp. 2445–2463, 2022. doi: 10.1093/mnras/stac1989

ФИО: Гусев Александр Сергеевич.
Ученая степень: доктор физико-математических наук.
Специальность: 1.3.1 – Физика космоса, астрономия.
Название организации: Государственный астрономический институт имени П.К. Штернберга Московского государственного университета им. М.В. Ломоносова.
Должность: ведущий научный сотрудник.

Публикации А.С. Гусева, близкие к теме диссертации С.Ю. Дедикова:

1. Kostiuk, V. S., Gusev, A. S., Marchuk, A. A., Shimanovskaya, E. V., "Gravitational instability and spatial regularity of the gas clouds and young stellar population in spiral arms of NGC 628", *Astronomy & Astrophysics*, vol. 698, p. L6, 2025. doi: 10.1051/0004-6361/202554886

2. Sakhibov, F. Kh., Kostiuk, V. S., Gusev, A. S., Shimanovskaya, E. V., "On the Nature of Spiral Arms in the Interacting Galaxy M51", *Astronomy Reports*, vol. 69, no. 5, pp. 348–362, 2025. doi: 10.1134/S1063772925701811

3. Kostiuk, Valeria, Marchuk, Alexander, Gusev, Alexander, Chugunov, Ilia V., "A Comprehensive Analysis on the Nature of the Spiral Arms in NGC 3686, NGC 4321, and NGC 2403", *Galaxies*, vol. 13, no. 2, p. 27, 2025. doi: 10.3390/galaxies13020027

4. Kostiuk, V. S., Marchuk, A. A., Gusev, A. S., "Cross-method Analysis of Corotation Radii Data Set for Spiral Galaxies", *Research in Astronomy and Astrophysics*, vol. 24, no. 7, p. 075007, 2024. doi: 10.1088/1674-4527/ad4d3b

5. Gusev, A. S., Sakhibov, F. Kh., Moiseev, A. V., Kostiuk, V. S., Oparin, D. V., "Parameters of Star Formation Regions in Galaxies NGC 3963 and NGC 7292", *Astronomy Reports*, vol. 68, no. 7, pp. 619–640, 2024. doi: 10.1134/S1063772924700616

6. Gusev, A. S., Sakhibov, F., Egorov, O. V., Kostiuk, V. S., Shimanovskaya, E. V., "Physical parameters of stellar population in star formation regions of galaxies", *Monthly Notices of the Royal Astronomical Society*, vol. 525, no. 1, pp. 742–760, 2023. doi: 10.1093/mnras/stad2076

7. Gusev, A. S., Moiseev, A. V., Zheltoukhov, S. G., "Gas Kinematics in the Magellanic-Type Galaxy NGC 7292", *Astrophysical Bulletin*, vol. 78, no. 3, pp. 293–303, 2023. doi: 10.1134/S1990341323700104

8. Gusev, A. S., "Regular Chains of Star Formation Regions in Spiral Arms and Rings of Disk Galaxies", *Astronomy Reports*, vol. 67, no. 5, pp. 458–469, 2023. doi: 10.1134/S1063772923050049

9. Sil'chenko, O. K., Moiseev, A. V., Gusev, A. S., Kozlova, D. V., "Kinematics and Origin of Gas in the Disk Galaxy NGC 2655", *Astrophysical Bulletin*, vol. 77, no. 4, pp. 397–406, 2022. doi: 10.1134/S1990341322040137

10. Gusev, A. S., Shimanovskaya, E. V., Zaitseva, N. A., "Spatial regularity of the young stellar population in spiral arms of late-type galaxies NGC 895, NGC 5474, and NGC 6946", *Monthly Notices of the Royal Astronomical Society*, vol. 514, no. 3, pp. 3953–3964, 2022. doi: 10.1093/mnras/stac1592

11. Sakhibov, F., Gusev, A. S., Hemmerich, C., "Azimuthal propagation of star formation in nearby spiral galaxies: NGC 628, NGC 3726, and NGC 6946", *Monthly Notices of the Royal Astronomical Society*, vol. 508, no. 1, pp. 912–925, 2021. doi: 10.1093/mnras/stab2532

12. Gusev, A. S., Dodin, A. V., "Peculiarities of the chemical abundance distribution in galaxies NGC 3963 and NGC 7292", *Monthly Notices of the Royal Astronomical Society*, vol. 505, no. 2, pp. 2009–2019, 2021. doi: 10.1093/mnras/stab1414

Ведущая организация

Полное название: Федеральное государственное бюджетное учреждение науки Физико-технический институт им. А.Ф. Иоффе Российской академии наук.
Сокращенное название: ФТИ им. А.Ф. Иоффе РАН.
Полное название (англ.): Ioffe Physical-Technical Institute of the Russian Academy of Sciences.
Сокращенное название (англ.): Ioffe Institute of RAS.
Адрес: 194021, Санкт-Петербург, Политехническая ул., д. 26.
Телефон: +7 (812) 297-22-45
e-mail: post@mail.ioffe.ru
Сайт: https://www.ioffe.ru/

Публикации сотрудников ведущей организации, близкие к теме диссертации С.Ю. Дедикова:

1. Gupta, N., Kerp, J., Balashev, S. A., Morelli, A. P. M., Combes, F., Krogager, J. -K., et al., "The MeerKAT Absorption Line Survey (MALS) data release 3: Cold atomic gas associated with the Milky Way", *Astronomy & Astrophysics*, vol. 698, p. A120, 2025. doi: 10.1051/0004-6361/202452407

2. Balashev, Sergei, Noterdaeme, Pasquier, Gupta, Neeraj, Krogager, Jens-Kristian, Combes, Françoise, et al., "Quasar radiation transforms the gas in a merging companion galaxy", *Nature*, vol. 641, no. 8065, pp. 1137–1141, 2025. doi: 10.1038/s41586-025-08966-4

3. Balashev, S. A., Kosenko, D. N., Noterdaeme, P., "First detections of CO absorption in the Magellanic Clouds and direct measurement of the CO-to-H_2 ratio", *Astronomy & Astrophysics*, vol. 696, p. L16, 2025. doi: 10.1051/0004-6361/202452913

4. Cuellar, R., Noterdaeme, P., Balashev, S., López, S., D'Odorico, V., Krogager, J. -K., "Exploring quasar evolution with proximate molecular absorbers: Insights from the kinematics of highly ionized nitrogen", *Astronomy & Astrophysics*, vol. 694, p. A294, 2025. doi: 10.1051/0004-6361/202453387

5. Klimenko, V. V., Balashev, S. A., Noterdaeme, P., Srianand, R., Ivanchik, A. V., "Excitation of CO molecules in diffuse gas over cosmic history", *Monthly Notices of the Royal Astronomical Society*, vol. 533, no. 2, pp. 1367–1393, 2024. doi: 10.1093/mnras/stae1863

6. Urbina, F., Noterdaeme, P., Berg, T. A. M., Balashev, S., López, S., Bian, F., "The rich galactic environment of a H_2-absorption-selected quasar. Lyα mapping down to the inner kiloparsecs via perfect natural coronagraphy and integral field spectroscopy", *Astronomy & Astrophysics*, vol. 688, p. L25, 2024. doi: 10.1051/0004-6361/202451236

7. Kosenko, D. N., Balashev, S. A., "HD Molecules in Milky Way", *Journal of Technical Physics*, vol. 69, no. 6, pp. 1602–1606, 2024. doi: 10.1134/S1063784224060185

8. Minter, Anthony H., Lockman, Felix J., Balashev, S. A., Ford, H. Alyson, "Limits on the OH Molecule in the Smith High-velocity Cloud", *The Astrophysical Journal*, vol. 966, no. 1, p. 76, 2024. doi: 10.3847/1538-4357/ad343d

9. Kosenko, D. N., Balashev, S. A., Klimenko, V. V., "Cold diffuse interstellar medium of Magellanic Clouds: II. Physical conditions from excitation of C I and H_2", *Monthly Notices of the Royal Astronomical Society*, vol. 528, no. 3, pp. 5065–5079, 2024. doi: 10.1093/mnras/stae354

10. Kislitsyn, P. A., Balashev, S. A., Murphy, M. T., Ledoux, C., Noterdaeme, P., Ivanchik, A. V., "A new precise determination of the primordial abundance of deuterium: measurement in the metal-poor sub-DLA system at z = 3.42 towards quasar J 1332+0052", *Monthly Notices of the Royal Astronomical Society*, vol. 528, no. 3, pp. 4068–4081, 2024. doi: 10.1093/mnras/stae248

11. Balashev, S. A., Kosenko, D. N., "Neutral carbon in diffuse interstellar medium: abundance matching with H_2 for damped Lyman alpha systems at high redshifts", *Monthly Notices of the Royal Astronomical Society*, vol. 527, no. 4, pp. 12109–12119, 2024. doi: 10.1093/mnras/stad3971

12. Ushakov, V. G., Balashev, S. A., Medvedev, E. S., "Analysis of the calculated and observed X-X ro-vibrational transition intensities in molecular hydrogen", *Journal of Molecular Spectroscopy*, vol. 399, p. 111863, 2024. doi: 10.1016/j.jms.2023.111863