

Nov 2024

## ALEXEI MOISEEV CURRICULUM VITAE

### PERSONAL INFORMATION

Date of Birth: 13 November 1976

Place of Birth: Moscow, USSR

### CONTACT INFORMATION

Dr. Alexei Moiseev

Affiliation: Special Astrophysical Observatory of the Russian Academy of Sciences

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### EDUCATION

Graduated:

1993 - 1999 Lomonosov Moscow State University, Faculty of Physics, Astronomy department,  
Experimental astronomy sub-department

Post-graduated:

1999 - 2002 Special Astrophysical Observatory of Russian Academy of Sciences (SAO RAS)

### SCIENTIFIC DEGREES

2012 **Doctor of Sciences** (astrophysics and stellar astronomy), Special Astrophysical Observatory of RAS, thesis on “Galaxies structure and evolution from the observations of their internal kinematics”

2002 **Ph.D.** (astrophysics and radio astronomy), Special Astrophysical Observatory of RAS, thesis on “Kinematics and morphology of stars and gas in barred galaxies”, supervisor: prof. V.L. Afanasiev

1999 **M.S.** (astronomer), Lomonosov Moscow State University, thesis on “Kinematics and photometry of the inner regions of spiral galaxies”, supervisor: prof. A.V. Zasov

### EMPLOYMENT HISTORY

2024 - since SAO RAS, Head of the laboratory of spectroscopy and photometry of extragalactic objects

2008 - 2024 SAO RAS, Leading Researcher

2004 - 2008 SAO RAS, Senior Researcher

2003 - 2004 SAO RAS, Researcher

1999 - 2002 SAO RAS, Ph.D. student

### FELLOWSHIPS

2013 Bochum University, Germany, DAAD fellowship

2007 European Southern Observatory, Chile, fellowship for non-ESO countries

2005 Instituto de Astrofísica de Canarias, Spain, visitor

2003 Padova University, Italy, visitor

## **AWARDS:**

- 2024 “The best mentor” medal of the Ministry of Science and Higher Education of the Russian Federation
- 2023 The I.S. Shklovsky Prize of the Russian Academy of Science for the series of works “Tidal and accretion structures in disk galaxies”
- 2021 The I.M. Kopylov Prize (the best work based on the 6-m telescope observations)
- 2012 The I.M. Kopylov Prize (the best instrument for the 6-m telescope)
- 2007 Alferov's Foundation prize (the best Russian young scientist)
- 2002 Kopylov scholarship (the best SAO RAS young scientist)
- 1999 Khokhlov prize of MSU Physical Faculty (the best students scientific work)

## **PROFESSIONAL MEMBERSHIPS**

Member of International Astronomical Union (since 2006)  
Bureau member of Astronomy council of the Russian Academy of Sciences  
Deputy chairman of the SAO RAS dissertation council

## **EDITORIAL BOARDS OF INTERNATIONAL JOURNALS**

Astrophysical Bulletin  
Frontiers in Astronomy and Space Sciences  
Galaxies

## **SCIENTIFIC INTERESTS**

Physics of galaxies: morphology and kinematics of different types of galaxies, feedback processes (impact of star formation and nuclear activity on interstellar medium), active galaxy nuclei and their environment  
Astronomy instrumentation: 3D spectroscopic methods (integral-field spectrographs, scanning Fabry-Perot interferometers)  
Instrumental scientists at the SAO RAS 6-m telescope (SCORPIO-2 focal reducer) and 2.5-m Moscow State University telescope (MaNGaL tunable-filter photometer)

## **TEACHING**

### **Courses of lectures**

“Methods for studying galaxies”, for students in Rostov-Don Federal University (2024)  
“Photometry and low-resolution spectroscopy”, for SAO RAS Ph.D. students (2016-2023)  
“3D spectroscopic technique”, for SAO RAS Ph.D. students (2017-2021)  
“3D spectroscopic technique”, for Padova University Ph.D. students (2003)

### **Supervisor of students works**

#### **Bachelor students (10)**

Ivan.Yu. Katkov (Moscow State University, 2009), Ksenia.I. Smirnova (Ural State University, 2010), Dmitry.V. Oparin (Moscow State University, 2012), Pavel.V. Yuanchikov (Moscow State University, 2012), Tatiana S. Bryukhareva (Moscow State University, 2016), Sergei S. Sapozhnikov (Moscow State University, 2017), Anastasia Sykova (St. Petersburg State University, 2019), Darya V. Kozlova (Ural Federal University, 2019-20), Alina I. Ikhsanova (Kazan Federal University, 2020-21), Yulia A. Galata (Kazan Federal University, 2024)

#### **Master students (5)**

Ksenia I. Smirnova (Ural State University, 2013), Dmitry.V. Oparin (Moscow State University, 2013), Tatiana S. Bryukhareva (Moscow State University, 2018), Darya V. Kozlova (Ural Federal University, 2022), Alina I. Ikhsanova (Kazan Federal University, 2022)

### **Supervisor of PhD thesis (6/8)**

Arina Arshinova (SAO RAS, in preparation): *Study of galaxy activity by their impact on the interstellar medium*

Anastasya D. Yarovova (Moscow State University, in preparation): *Study of massive stars feedback in nearby dwarf galaxies*

Behjat Zarei Jalalabadi (2023, Birjand University, Iran): *The ionized gas excitation mechanisms in nearby galaxies: an observational study*

Eugenij A. Malygin (2023, SAO RAS): *Study of geometry and kinematics of the central regions of active galaxies*

Elena S. Shablovinskaya (2021, SAO RAS): *Study of the central regions of active galaxies in polarised light*

Alexander E. Perepelitsyn (2021, IAA RAS): *Panoramic spectroscopy facilities for the Russian telescopes*

Dmitry V. Oparin (2020, SAO RAS): *Study of impact of star formation on ionized gas in galaxies*

Oleg V. Egorov (Moscow State University, 2011): *Study of gaseous and dust components of interstellar medium in the galaxies with violent star formation IC 10 and VII Zw 403*

## **PUBLICATIONS**

ORCID [0000-0002-0507-9307](https://orcid.org/0000-0002-0507-9307)

Web of science Researcher ID: [H-9391-2013](https://www.researchgate.net/profile/H-9391-2013)

ResearchGate : <https://www.researchgate.net/profile/Alexei-Moiseev>

NASA ADS verified list:

[https://ui.adsabs.harvard.edu/search/fq=%7B!type%3Daqp%20v%3D%24fq\\_database%7D&fq\\_database=\(database%3Aastronomy\)&p\\_=0&q=docs\(library%2FyDillmvwShK1mYZ4YYFWBw\)&sort=date%20desc%2C%20bibcode%20desc](https://ui.adsabs.harvard.edu/search/fq=%7B!type%3Daqp%20v%3D%24fq_database%7D&fq_database=(database%3Aastronomy)&p_=0&q=docs(library%2FyDillmvwShK1mYZ4YYFWBw)&sort=date%20desc%2C%20bibcode%20desc)

Bibliometry (November 2026)

WoS H-index:27 Publications:178 Citations:3089

NASA ADS H-index:30 Publications:277 Citations:3675

## **THE MOST RELEVANT PUBLICATIONS**

### **Review**

1. Ionizing spotlight of active galactic nucleus, Moiseev A.V., Smirnova A.A. 2023, Galaxies, 11, 118
2. Scanning Fabry-Perot Interferometer of the 6-m SAO RAS Telescope, Moiseev A. V. 2021, Astrophysical Bulletin, 76, 316

### **Extended emission line structures in active galaxies**

1. The TELPERION Survey for Extended Emission Regions around AGN: a strongly-interacting and merging galaxy sample, Keel W., Moiseev A., Uklein R., Smirnova A. 2024, MNRAS, 530, 1624
2. Gas and stars in the Teacup quasar looking with the 6-m telescope, Moiseev A. V., Ikhsanova A. I. 2023, Universe, 9(2), 66
3. SDSS-IV MaNGA: The Nature of an Off-galaxy Ha Blob - A Multi-wavelength View of Offset Cooling in a Merging Galaxy Group, Pan H-A., Lin L., Hsieh B.-C., Michalowski M.J., Bothwell M.S., Huang S., Moiseev A.V., et al. 2020, ApJ, 903, 16
4. A close look at the well-known Seyfert galaxy: extended emission filaments in Mrk 6,
5. Smirnova, Aleksandrina A.; Moiseev, Alexei V.; Dodonov, Sergei N. 2018, MNRAS, 481, 4542
6. HST Imaging of Fading AGN Candidates I: Host-Galaxy Properties and Origin of the Extended Gas, William C. Keel, W. Peter Maksym, Vardha N. Bennert, Chris J. Lintott, S. Drew Chojnowski, Alexei Moiseev et al. 2015, AJ, 149, 155
7. Seyfert galaxies that are undergoing merging but appear non-interacting, A.A. Smirnova, A.V. Moiseev, V.L. Afanasiev 2010, MNRAS, 408, 400

### **Multi-spin and polar-ring galaxies, galactic accretion**

1. Star formation in outer rings of S0 galaxies. V. UGC 4599 - an S0 with gas probably accreted from a filament, Sil'chenko O. , Moiseev A., Oparin D., Beckman J. E., Font J. 2023, A&A, 669L, 10
2. Multiple gas acquisition events in galaxies with dual misaligned gas disks, Cao X., Chen Y.-M., Shi Y., Bao M., Moiseev A., Bizyaev D., Li S.-L., Fernandez-Trincado J., Riffel R., Riffel R., Lane L. 2022, Nature Astronomy, 6, 1464
3. Metallicity and ionization state of the gas in polar-ring galaxies, O.V. Egorov, A.V. Moiseev 2019, MNRAS, 486, 4186
4. The Gas Kinematics, Excitation, and Chemistry, in Connection with Star Formation, in Lenticular Galaxies, Olga K. Sil'chenko, Alexei V. Moiseev, Oleg V. Egorov 2019, ApJS, 244, 6
5. To be or not to be oblate: the shape of the dark matter halo in the polar ring galaxies, Khoperskov S., Moiseev A., Khoperskov A., Saburova A. 2014, MNRAS, 441, 2650
6. Hoag's Object: Evidence for Cold Accretion onto an Elliptical Galaxy, Ido Finkelman, Alexei Moiseev, Noah Brosch, Ivan Katkov 2011, MNRAS, 418, 1834
7. A new catalogue of polar-ring galaxies selected from the SDSS., Moiseev A.V., Smirnova K.I., Smirnova A.A., Reshetnikov V.P. 2011, MNRAS, 418, 244
8. Two more disk galaxies with global gas counterrotation, Si'lchenko O.K., A.V. Moiseev, V.L. Afanasiev 2009, ApJ, 694, 1550

### **Starformation feedback in dwarf galaxies**

1. Stellar feedback impact on the ionized gas kinematics in the dwarf galaxy Sextans B, Gerasimov I.S., Egorov O.V., Moiseev A., Kniazev A.Yu. 2024, MNRAS, 529, 1138
2. Star-formation complexes in the 'galaxy-sized' supergiant shell of the galaxy Holmberg I, Egorov O. V., Lozinskaya T. A., Moiseev A. V., Smirnov-Pinchukov G. V. 2018, MNRAS, 478, 3386
3. Ionized gas velocity dispersion in nearby dwarf galaxies: looking at supersonic turbulent motions, Moiseev A.V., Lozinskaya T.A., 2012, MNRAS, 423, 1831
4. What controls the ionized gas turbulent motions in dwarf galaxies?, Alexei V. Moiseev, Anton V. Tikhonov, Anatoly Klypin 2015, MNRAS, 449, 3568
5. Synchrotron Superbubble in the IC 10 Galaxy: A Hypernova Remnant? T.A. Lozinskaya,

### Gravitational lenses

1. Spectroscopy and polarimetry of the gravitationally lensed quasar SDSS J1004+4112 with the 6m SAO RAS telescope, L. C. Popovic, V. L. Afanasiev, A. Moiseev, et al., 2020, *A&A*, 634, A27
2. Two New Large Separation Gravitational Lenses from SDSS, V. Belokurov, N.W. Evans, P.C. Hewett, A. Moiseev, R.G. McMahon, S.F. Sanchez, L.J. King 2009, *MNRAS*, 392, 104
3. The Cosmic Horseshoe: Discovery of an Einstein Ring around a Giant Luminous Red Galaxy, V. Belokurov, N.W. Evans, A. Moiseev, L.J. King, P.C. Hewett, M. Pettini, L. Wyrzykowski, R.G. McMahon, G. Gilmore, S.F. Sanchez, A. Udalski, S. Koposov, D.B. Zucker, C.J. Walcher, 2007, *ApJ*, 671, 9L

### Star formation driven galactic winds

1. Systematic study of outflows in the Local Universe using CALIFA: I. Sample selection and main properties, Carlos Lopez-Coba, Sebastian F. Sanchez, Joss Bland-Hawthorn, Alexei V. Moiseev, Irene Cruz-Gonzalez, Ruben Garcia-Benito, Jorge Barrera-Ballesteros, Lluis Galbany, 2019, *MNRAS*, 482 , 4032
2. Star formation driven galactic winds in UGC 10043, C. Lopez-Coba, S. F. Sanchez, A. V. Moiseev, D. V. Oparin, et al. 2017, *MNRAS*, 467, 4951
3. Galactic wind in NGC 4460: new observations, Oparin D.V., Moiseev A.V. 2015, *Astrophysical Bulletin*, 70, 392

### Dynamics of barred and ring galaxies

1. Propagating star formation in the collisional ring galaxy Arp 10., Bizyaev D.V., Moiseev, A.V., Vorobyov E.I. 2007, *ApJ*, 662, 304
2. Nature of nuclear rings in unbarred galaxies: NGC 7742 and NGC 7217, Sil'chenko O.K., Moiseev A.V. , 2006, *AJ*, 131, 1336
3. Structure and kinematics of candidate double-barred galaxies, A.V. Moiseev, J.R. Valdes and V.H. Chavushyan 2004, *A&A*, 421, 433
4. The Effect of Projection on the Observed Gas Velocity Fields in Barred Galaxies, A.V. Moiseev, V.V. Mustsevoi 2000, *Astronomy Letters*, 26, 565

### Astronomical instrumentation

1. Mapper of Narrow Galaxy Lines (MaNGaL): new tunable filter imager for Caucasian telescopes, A.V. Moiseev, A.E. Perepelitsyn, D.V. Oparin, 2020, *Experimental Astronomy*, 50, 199
2. Low and intermediate resolution spectrograph ADAM for 1.6-m telescope AZT-33IK, V.L. Afanasiev, S.N. Dodonov, V.R. Amirkhanian, A.V. Moiseev 2016, *Astrophysical Bulletin*, 71, 479
3. SCORPIO at the 6-m telescope: current state and perspectives for spectroscopy of galactic and extragalactic objects, Afanasiev V., Moiseev A. 2011, *Baltic Astronomy*, 20, 363
4. The universal focal reducer of the 6-m telescope SCORPIO, Afanasiev V.L. & Moiseev A.V., 2005, *Astronomy Letters*, 31, 194

**INTERNATIONAL CONFERENCES ORGANIZING COMMITTEES:**

- 2024 "Active galaxies at different scales and wavelengths", SAO RAS, Russia, SOC co-Chair  
2023 14th Serbian Conference on Spectral Line Shapes in Astrophysics, 2023, Nis, Serbia  
2021 13th Serbian Conference on Spectral Line Shapes in Astrophysics, 2021, Belgrade, Serbia,  
2019 "Multi-spin galaxies", Asiago, Italy, SOC member  
2016 "Multi-spin galaxies", SAO RAS, Russia, SOC co-Chair  
2015 "3D view on interacting and post-interacting galaxies from clusters to voids", special session of EWASS-2015, Tenerife, Spain, SOC co-Chair  
2013 "Multi-spin galaxies", INAF, Naples, SOC co-Chair  
2012 "Galaxy surveys using Integral Field Spectroscopy: Achievements and Opportunities", 9<sup>th</sup> Potsdam Thinkshop, Potsdam (AIP), Germany, SOC member