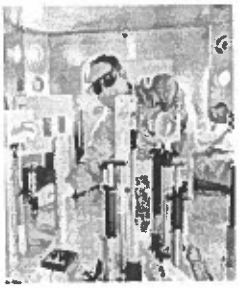
PERSONAL INFORMATION

# Evgeny Filippov



ELI NP/ IFIN HH – Extreme Light Infrastructure - Nuclear Physics, Bucharest, Magurele, Romania.

H-index: 12

## WORK EXPERIENCE

**July 2025 – on time**

### Physicist

ELI NP/ IFIN HH – Extreme Light Infrastructure - Nuclear Physics, Bucharest, Magurele, Romania. Address: No. 30, Reactorului Street, Magurele, Ilfov, Romania (077125) Web: https://www.eli-np.ro/

- Postdoctoral position. Experiments on laser-matter interactions, operations with high power laser systems.

**October 2023 – June 2025**

### Scientist

- CLPU – Spanish Center for Pulsed Lasers. Address: C/Adaja, 8, 37185 Villamayor, Salamanca, Spain. Web: https://www.clpu.es/
- Ion and x-ray spectroscopy, coordination of experiments, laboratory astrophysics, ICF and particle acceleration experiments, radioisotope production. Absolute Calibrations for High Repetition Rate Detector Systems at the CLPU. Experiments on laser-matter interactions. Ion and x-ray spectroscopy.

**September 2018 – September 2023**

### Senior Reseacrher

- JIHT RAS – Joint Institute for High Temperatures of the Russian Academy of Sciences, Address: Izhorskaya str., 13, Str. 2, Moscow, 125412, Russia. Web: https://www.jiht.ru/
- Experimental studies in laboratory astrophysics and ICF, HEDP, and technological applications. Generation of shocks, instabillities, particle acceleration in a strong external magnetic field. X-ray and optical diagnostics: spectroscopy, radiography, imaging, SOP, diffractometry, interferometry, monochromators, VISAR. Design of diagnostical components and equipment.

**November 2019 – November 2022**

### Research Fellowship of Russian Foundation for Basic Research

- Institute of Applied Physics of the Russian Academy of Sciences . Address: 6 Ul'yanov Street, 603950, Nizhny Novgorod, Russia . Web: https://www.ipfran.ru/
- Ion and x-ray spectroscopy, coordination of experiments, laboratory astrophysics, ICF and particle acceleration experiments, radioisotope production. Absolute Calibrations for High Repetition Rate Detector Systems at the CLPU. Experiments on laser-matter interactions. Ion and x-ray spectroscopy.

**September 2015 – September 2018**

### Junior Reseacrher

- JIHT RAS – Joint Institute for High Temperatures of the Russian Academy of Sciences, Address: Izhorskaya str., 13, Str. 2, Moscow, 125412, Russia. Web: https://www.jiht.ru/
- Experimental studies in laboratory astrophysics and ICF, HEDP, and technological applications. X-ray and optical diagnostics: spectroscopy, radiography, imaging, SOP, interferometry. Design of diagnostical components and equipment.

**October 2010 – June 2018**

### Engineer/laboratory assistant

- NRNU MEPhI – National Research Nuclear University "MEPHI". Address: 115409, Russian Federation, Moscow, Kashirskoe shosse, 31. Web: https://www.mephi.ru/
- Experiments on micropinch installation and in laser-matter interactions. Providing shadowgraphy /interferometry diagnostics, probing with N2O non-visible lasers.

## EDUCATION AND TRAINING

| | |
|---|---|
| 2014 – 2018 | PhD / Plasma Physics |
| | •NRNU MEPhI – National Research Nuclear University "MEPHI". Address: 115409, Russian Federation, Moscow, Kashirskoe shosse, 31. |
| | • PhD thesis "X-ray diagnostics of supersonic laser-induced plasma flows with astrophysical similarity". Supervisors – Pikuz S.A./Skobelev I.Yu. |
| 2012 – 2014 | M.Sc. Applied Physics / Plasma Physics |
| | • NRNU MEPhI – National Research Nuclear University "MEPHI". Address: 115409, Russian Federation, Moscow, Kashirskoe shosse, 31. |
| | • Plasma Physcis department |
| 2018 – 2012 | • B.Sc. Applied Physics / Plasma Physics |
| | • NRNU MEPhI – National Research Nuclear University "MEPHI". Address: 115409, Russian Federation, Moscow, Kashirskoe shosse, 31. |
| | • Plasma Physcis department |

## PERSONAL SKILLS

Mother tongue(s): Russian

Other language(s): English (C1-C2), French (A1-A2)

**Communication skills**

- Good communication skills gained through collaborations with researchers and participation in conferences and scientific projects.
- Public speaking skills through invited lectures, personal oral reports for the projects involved in, coordination of the experiments, leading a student association in NRNU MEPhI

**Organisational / managerial skills**

- Leadership - ***Chairman of Student Science Society*** in NRNU MEPHI 2014-2015. Manager and ***main principal organisator*** of "II international conference Plasma, Laser researches and technologies" in NRNU MEPhI, January 2016, Moscow – scientific director of the conference and book of abstracts. ***Coordinator*** of several experimental campaigns at ***CLPU/ GSI/ PALS*** laser facilities. ***PostDoc Fellowship*** by Russian Foundation for Basic Research in 2019-2022. ***Winner of postdoctoral fellowship*** programme MERIT supported by the HORIZON EUROPE and MSCA-COFUND grant with the topic "Ultra-relativistic laser plasma as a few MeV ion source of extreme fluxes for Fusion Energy" (2024, not taken).
- Administration and management – ***Member of the scholarship committee*** of the faculty "Experimental and Theoretical Physics" in NRNU MEPhI in 2012-2015. JIHT RAS council of young scientists. ***Member of PROBONO*** COST, WG2.
- Adaptability and time management – through participation in various scientific events and leading projects
- Responsibility – Participation in the ***EUROFUSION*** Enabling Research Projects: AWP17-ENR-IFE-CEA-01 "Preparation and Realization of European Shock Ignition" and "Advancing shock ignition for direct-drive inertial fusion". Participation in projects supported by RFBR, RSF, National Center for Physics and Mathematics, RAS Presidium Program for Basic Research and other granting funds.
- **Supervising**: 2 undergraduate students

**Job-related skills**

- Spectroscopy (X-ray, ion and electrons). Experimental and theoretical work during campaigns.
- Imaging, shadowgraphy, radiography and other methods of plasma visualization.
- X-ray diffractometry through managing and comissioning of RIGAKU Smartlab in JIHT RAS
- Understanding mechanisms occured in laser-induced plasma – electron and ion acceleration, ICF, laboratory astrophysics, plasma instabillities, shocks, etc.
- Preparation of scientific articles and reports. Number of publications: >40. H-index: = 12.
- Article reviewer in journals

- Data analysis.

Digital competence
- Digital data analysis by Python/Matlab, numerical radiative and hydrodynamic codes (PrismSPECT, FLYCHK, Helios), ray-tracing codes (OASYS, XOP, MCNP)
- Statistical analysis, Machine learning-related approaches
- Design of experiments and manufacture of elements (SolidWorks, Comsol Multiphysics, EagleCad, SpringLayout, Adobe Illustrator)
- Good knowledge of office suite (word processor, spread sheet, presentation software)
- Good knowledge of photo editing software gained as an amateur photographer

Other skills
- Critical thinking
- Attention to details

Driving licence B

ADDITIONAL INFORMATION

Publications
Presentations
Projects
Conferences
Seminars
Honours and awards
Memberships
References
Citations
Courses
Certifications

**MAJOR PUBLICATIONS** :

- [1] E.D. Filippov et.al., "Characterization of hot electrons generated by laser-plasma interaction at Shock Ignition intensities" // Matter and Radiation at Extremes 8, 065602 (2023)
- [2] E.D. Filippov et al., «Enhanced x-ray emission arising from laserplasma confinement by a strong transverse magnetic field» // Scientific Reports 11, 8180 (2021)
- [3] E.D. Filippov et.al., "X-ray spectroscopy evidence for plasma shell formation in experiments modeling accretion columns in young stars" // Matter and Radiation at Extremes 4, 064402 (2019)
- [4] W. Yao, A. Fazzini, E.D. Filippov et al. "Laboratory evidence for proton energization by collisionless shock surfing" // Nature Physics 17, 1177–1182 (2021)
- [5] G. Revet, B. Khiar, E. Filippov et al. "Laboratory disruption of scaled astrophysical outflows by a misaligned magnetic field" // Nature Communications 12, 762 (2021)
- [6] S. Bolanos, A. Sladkov, E. Filippov et.al. "Laboratory evidence of magnetic reconnection hampered in obliquely interacting flux tubes"// Nature Communications 13:6426 (2022) (IF= 17.694)
- [7] G. Revet et.al., "Laboratory unravelling of matter accretion in young stars"// Science Advances 3, 11 (2017)
- [8] B. Khiar et. al., "Laser-produced magnetic-Rayleigh-Taylor unstable plasma slabs in a 20T magnetic field" // Physical Review Letters 123, 205001 (2019)
- [9] D. P. Higginson, et.al., "Enhancement of Quasistationary Shocks and Heating via Temporal Staging in a Magnetized Laser-Plasma Jet" // Physical Review Letters, 119 255002 (2017).
- [10] K. Burdonov, G. Revet, E. Fillipov et.al. "Laboratory evidence for an asymmetric accretion structure upon slanted matter impact in young stars" // Astronomy & Astrophysics 642, A38 (2020)

**PROJECTS**:

- EUROFUSION Enabling Research Projects: AWP17-ENR-IFE-CEA-01 "Preparation and Realization of European Shock Ignition" and "Advancing shock ignition for direct-drive inertial fusion".
- IMPULSE project (ELI ERIC): "Absolute Calibrations for High Repetition Rate Detector Systems at the CLPU"
- PROBONO COST, member of WG2.
- RFBR 18-52-53033 – Joint project of RFBR and National Natural Science Foundation of China // Creation of a source of fast ions and hard X-ray radiation based on femtosecond laser plasma
- RFBR 14-02-91171 – Joint project of RFBR and National Natural Science Foundation of China // Study of ionization processes in giant inert gas clusters and thin foils caused by high-contrast subpetawatt laser pulses

- ***RFBR 19-32-60008 (personal, 103k€ )*** // Development and application of radiative diagnostic methods for the laboratory simulation of extreme astrophysical phenomena by means of laser-induced and magnetized plasma streams.
  *Results published in:*
  - **Nature Physics** 17, 1177–1182 (2021)
  - **Matter and Radiation at Extremes** 7, 014402 (2022)
  - **Nature Communications** 12, 762 (2021)
  - **Scientific Reports** 11, 8180 (2021)
  - **Matter and Radiation at Extremes**, 6, 064402 (2021)
  - **Journal of Physics: Conference Series**, 1556 012006 (2020)
- Participation in other projects supported by RFBR, RSF, National Center for Physics and Mathematics, RAS Presidium Program for Basic Research and other granting funds.

**INVITED LECTURES (in person):**

- PLASMA 2025 Conference, 15-19 September 2025, IPPLM, Warsaw, Poland.
- HB11 web-seminar co-organized by PROBONO and HB11 Energy. 27th February 2025
- GSI Plasma Physics seminar series, Darmstadt, November 5, 2024
- 20th International Workshop Complex Systems of Charged Particles and Their Interactions with Electromagnetic Radiation, Moscow, Russia, April 8-12, 2024
- 18th International Workshop "Complex Systems of Charged Particles and Their Interactions with Electromagnetic Radiation", April 11-13 2022, GPI RAS, Moscow, Russia
- International Conference on High Energy Density Science 2020 (HEDS2020), 20-24 April 2020, Pacifico Yokohama, Japan
- Complex Systems of Charged Particles and their Interactions with Electromagnetic Radiation 2019, March 25-27 2019, GPI RAS, Moscow, Russia
- Complex Supersonic Plasma Flows with Astrophysical Relevance in Laser Plasma", Complex Systems of Charged Particles and Their Interactions with Electromagnetic Radiation, Moscow, Russia, April 5-7, 2017

**AWARDS:**

- Winner of postdoctoral fellowship programme MERIT supported by the HORIZON EUROPE and MSCA-COFUND grant with the topic "Ultra-relativistic laser plasma as a few MeV ion source of extreme fluxes for Fusion Energy" (2024)
- Personal RFBR grant (fellowship) in 2019-2022
- FPMU JIHT RAS scholarship in 2017/2018
- Scholarship by the order #945 of the Russian Government in 2011-2014 in nomination for «high achievements in scientific-research activities» among students in state federal educational institutes

**CITATIONS:**

- 418 (Scopus), 538 (ResearchGate), 391 (WoS) (in September 2025)

**REVIEWER:**

- Communications Physics (2024, IF=5.5)

**COURSES:**

- Stretcher and Compressor in PW laser systems by Thales in ELI-NP, Magurele, Romania
- "Legislative aspects and practice of scholarship provision for students of higher education institutions "Stipkom-2013", Moscow, Russia
- Radioprotection course for the group A. "Radiation Safety When Handling Generating Radiation Sources. Radiation Control and Protection" in the amount of 72 hours. Moscow, Russia

**SELF-ASSESSMENT FORM**
**for Published Scientific Papers**
**for Being Awarded the Professional Rank of Recognised Researcher**
**(3rd Rank Research Scientist - CS III) upon Hiring on the Post**

**Table 1. Scientific Articles**

In the table below:
Articles where the candidate is not a first author or a corresponding author: $P_1 = \sum_i a_i / n_i^{ef}$
Articles where the candidate is a first author or a corresponding author: $P_2 = \sum_i a_i$

$a_i = ai_i$ = is the absolute Article influence score of the scientific journal where article *i* was published, according to its year of publication as per http://www.eigenfactor.org/ for articles published until 2006 and Journal Citation Report (Web of Science) starting from 2007; if the publishing year cannot be found in the database, the closest year shall be chosen.

$n_i^{ef}$ = is the actual number of authors of item *i* and takes the following values:

| | |
|---|---|
| $n_i$ | if $n_i \leq 5$ |
| $(n_i + 5)/2$ | if $5 < n_i \leq 15$ |
| $(n_i + 15)/3$ | if $15 < n_i \leq 75$ |
| $(n_i + 45)/4$ | if $n_i > 75$ |

$n_i$ is typically the number of authors of item *i*. In the case of HEPP (High Energy Particle Physics) publications with a large number of authors, if the article is based on an internal note of the collaboration and the candidate is a co-author of this internal note, then $n_i^{ef}$ can be given by the number of authors in the internal note.

| Category of Articles | Item in the List of Papers | Score | Calculation Details |
|---|---|---|---|
| | 1 | 0.788 | Nature Physics 17, 1177–1182 (2021)<br>**AIS = 9.983**<br>No. of Authors: 23, Actual No.: 12.66 |
| **1)** Articles in ISI Thomson Reuters rated journals and ISI indexed proceedings volumes for which the candidate **is not first author or correspondent author** | 2 | 0.443 | Nature Communications 12, 762 (2021)<br>**AIS = 5.617**<br>No. of Authors: 23, Actual No.: 12.66 |
| | 3 | 0.607 | Nature Communications 13:6426 (2022)<br>**AIS = 5.767**<br>No. of Authors: 14, Actual No.: 9.5 |
| | 4 | 0.406 | Science Advances 3, 11 (2017),<br>**AIS = 5.413**<br>No. of Authors: 25, Actual No.: 13.333 |

| | | | |
|---|---|---|---|
| | 5 | 0.252 | Physical Review Letters, 119 255002 (2017).<br>**AIS = 3.190**<br>No. of Authors: 23, Actual No.: 12.66 |
| | 6 | 0.286 | Physical Review Letters 123, (2019) 205001<br>**AIS = 3.151**<br>No. of Authors: 18, Actual No.: 11 |
| | 7 | 0.282 | Applied Energy 334, 120693 (2023)<br>**AIS = 1.973**<br>No. of Authors: 9, Actual No.: 7 |
| | 8 | 0.137 | Astronomy & Astrophysics 642, A38 (2020)<br>**AIS = 1.510**<br>No. of Authors: 18, Actual No.: 11 |
| | 9 | 0.148 | Astronomy & Astrophysics **665**, A87 (2022)<br>**AIS = 1.681**<br>No. of Authors: 19, Actual No.: 11.33 |
| | 10 | 0.076 | Matter and Radiation at Extremes, 6, 064402 (2021)<br>**AIS =1.607**<br>No. of Authors: 48, Actual No.: 21 |
| | 11 | 0.115 | Matter and Radiation at Extremes 7, 014402 (2022)<br>**AIS = 1.425**<br>No. of Authors: 22, Actual No.: 12.33 |
| | 12 | 0.247 | Matter and Radiation at Extremes 6, 014402 (2021)<br>**AIS =1.607**<br>No. of Authors: 8, Actual No.: 6.5 |
| | 13 | 0.154 | Matter and Radiation at Extremes 4, (2019) 044401<br>**AIS = 1.237**<br>No. of Authors: 11, Actual No.: 8 |
| | 14 | 0.052 | High Power Laser Science and Engineering 6, UNSP e43 (2018)<br>AIS = 0.701<br>No. of Authors: 25, Actual No.: 13.333 |
| | 15 | 0.049 | High Power Laser Science and Engineering 7, e51 (2019) 1-14<br>AIS = 0.720<br>No. of Authors: 29, Actual No.: 14.666 |
| | 16 | 0.111 | Scientific Reports 9, 8157 (2019)<br>**AIS = 1.261**<br>No. of Authors: 19, Actual No.: |

| | | | |
|---|---|---|---|
| | | | 11.333 |
| | 17 | 0.091 | Scientific Reports **13**, 20681 (2023)<br>AIS = 1.061<br>No. of Authors: 20, Actual No.: 11.666 |
| | 18 | 0.0602 | Optics Express 31(16), 26383-26397 (2023)<br>AIS =0.723<br>No. of Authors: 21, Actual No.: 12 |
| | 19 | 0.028 | ECS Journal of Solid State Science and Technology 12 066008 (2023)<br>AIS =0.312<br>No. of Authors: 18, Actual No.: 11 |
| | 20 | 0.021 | Laser and Particle Beams 2021, ID 4141522 (2021)<br>AIS =0.272<br>No. of Authors: 24, Actual No.: 13 |
| | 21 | 0.066 | High Energy Density Physics 23, pp. 48-59 (2017)<br>AIS = 0.722<br>No. of Authors: 23, Actual No.: 11 |
| | 22 | 0.131 | High Energy Density Physics 32, (2019) 89-95<br>AIS = 0.720<br>No. of Authors: 6, Actual No.: 5.5 |
| | 23 | 0.0123 | Physics of Atomic Nuclei, **V 79,** №5, pp. 648–665 (2016)<br>AIS = 0.123<br>No. of Authors: 15, Actual No.: 10 |
| | 24 | 0.025 | Photonics **10**, 1250 (2023)<br>AIS = 0.369<br>No. of Authors: 29, Actual No.: 14.666 |
| | 25 | 0.024 | Physics of Plasmas 31, 053108 (2024)<br>AIS = 0.516<br>No. of Authors: 50, Actual No.: 21.666 |
| | 26 | 0.088 | High Power Laser Science and Engineering, 12, e94 (2024)<br>AIS = 0.909<br>No. of Authors: 16, Actual No.: 10.333 |
| | 27 | 0.034 | JINST 20 C07001 (2025)<br>AIS = 0.374<br>No. of Authors: 18, Actual No.: 11 |
| | 28 | 0.061 | Matter and Radiation at Extremes 10, 037402 (2025)<br>**AIS = 1.234**<br>No. of Authors: 46, Actual No.: 20.333 |

| | | | |
|---|---|---|---|
| | 29 | 0.034 | Phys. Plasmas 32, 043106 (2025)<br>AIS = 0.516<br>No. of Authors: 30, Actual No.: 15 |
| | 30 | 0.116 | Matter and Radiation at Extremes 10, 027203 (2025)<br>**AIS = 1.234**<br>No. of Authors: 17, Actual No.: 10.666 |
| | 31 | 0.049 | Photonics 12(1), 71 (2025)<br>AIS = 0.346<br>No. of Authors: 9, Actual No.: 7 |
| | 32 | 0.137 | Scientific Reports 14, 29935 (2024)<br>AIS = 1.031<br>No. of Authors: 10, Actual No.: 7.5 |
| | 33 | 0.496 | Nature Communications 15, 10065 (2024)<br>**AIS =5.622**<br>No. of Authors: 19, Actual No.: 11.333 |
| | 34 | 0.0073 | Nuovo Cimento della Societa Italiana di Fisica C 47(5), 324 (2024)<br>AIS = 0.073<br>No. of Authors: 15, Actual No.: 10 |
| | 35 | 0.038 | Astronomy Reports 68, p. 345–355 (2024)<br>AIS =0.189<br>No. of Authors: 5, Actual No.: 5 |
| | 36 | 0.035 | Appl. Sci. 14, 6101 (2024)<br>AIS =0.438<br>No. of Authors: 22, Actual No.: 12.333 |
| | 37 | - | Physics Procedia, 71, p.142–145, (2015)<br>AIS =0<br>No. of Authors: 15, Actual No.: 10 |
| | 38 | 0.096 | High Power Laser Science and Engineering, accepted<br>AIS = 0.909<br>No. of Authors: 14, Actual No.: 9.5 |
| 2) Articles in ISI Thomson Reuters rated journals and ISI indexed proceedings volumes for which the candidate is **first author or correspondent author** | 1 | 1.323 | **Matter and Radiation at Extremes** 8, 065602 (2023) |
| | 2 | 1.237 | **Matter and Radiation at Extremes** 4 (2019) 064402 |
| | 3 | 1.208 | **Scientific Reports** 11, 8180 (2021) |
| | 4 | 0.406 | **Symmetry** 14(12):2536 (2022) |
| | 5 | 0.432 | **Atoms** 13(6), 51 (2025) |
| | 6 | | J. Phys. Conf. Ser, 1556 (2020) 012006 |
| | 7 | - | Journal of Physics: Conference Series 768, (2016) 012012 |

| | | | |
|---|---|---|---|
| | 8 | - | J. Phys. Conf. Ser., 774 (2016) 012114 |
| **TOTAL** | | **10.414** | |

Applicant's Surname First Name: EVGENY FILIPPOV

Signature ....

# Dr. Evgeny Filippov's list of publications

*ResearcherID: S-4854-2016*
*Scopus Author ID: 56845148600*
*Science Index: 5735-5523*
*ORCID: 0000-0001-8774-8860*
*H-index: 12*

## *Major scientific publications:*

[1] E.D. Filippov, M. Khan, A. Tentori, P. Gajdos, A.S. Martynenko, R. Dudzak, P. Koester, G. Zeraouli, D. Mancelli, F. Baffigi, L.A. Gizzi, S.A. Pikuz, Ph.D. Nicolai, N. Woolsey, R. Fedosejevs, M. Krus, L. Juha, D. Batani, O. Renner, and G. Cristoforetti. "Characterization of hot electrons generated by laser-plasma interaction at Shock Ignition intensities" // **Matter and Radiation at Extremes** 8, 065602 (2023)

[2] E.D. Filippov, S.S. Makarov, K.F. Burdonov, W. Yao, G. Revet, J. Béard, S. Bolaños, S.N. Chen, A. Guediche, J. Hare, D. Romanovsky, I.Yu. Skobelev, M. Starodubtsev, A. Ciardi, S.A. Pikuz and J. Fuchs. «Enhanced x-ray emission arising from laser-plasma confinement by a strong transverse magnetic field», **Scientific Reports** 11, 8180 (2021)

[3] E.D. Filippov, I.Yu. Skobelev, G.Revet, S.N. Chen, B. Khiar, A. Ciardi, D. Khaghani, D.P. Higginson, S.A. Pikuz and J. Fuchs. "X-ray spectroscopy evidence for plasma shell formation in experiments modeling accretion columns in young stars" , **Matter and Radiation at Extremes** 4, 064402 (2019)

[4] W. Yao, A. Fazzini, S. N. Chen, K. Burdonov, P. Antici, J. Béard, S. Bolaños, A. Ciardi, R. Diab, E.D. Filippov, S. Kisyov, V. Lelasseux, M. Miceli, Q. Moreno, V. Nastasa, S. Orlando, S. Pikuz, D. C. Popescu, G. Revet, X. Ribeyre, E. d' Humières and J. Fuchs. «Laboratory evidence for proton energization by collisionless shock surfing», **Nature Physics** 17, 1177 - 1182 (2021)

[5] G. Revet, B. Khiar, E. Filippov, C. Argiroffi, J. B´eard, R. Bonito, M. Cerchez, S. N. Chen, T. Gangolf, D. P. Higginson, A. Mignone, B. Olmi, M. Ouill´e, S. N. Ryazantsev, I. Yu. Skobelev, M. I. Safronova, M. Starodubtsev, T. Vinci, O. Willi, S. Pikuz, S. Orlando, A. Ciardi, and J. Fuchs. "Laboratory disruption of scaled astrophysical outflows by a misaligned magnetic field, **Nature Communications** 12, 762 (2021)

[6] S. Bolanos, A. Sladkov, R. Smets, S.N. Chen, A. Grisollet, E. Filippov, J.L Henares, V. Nastasa, S. Pikuz, R. Riquier, M. Safronova, A. Severin, M. Starodubtsev, J. Fuchs. "Laboratory evidence of magnetic reconnection hampered in obliquely interacting flux tubes" // **Nature Communications** 13:6426 (2022)

[7] G. Revet, S.N. Chen, R. Bonito, B. Khiar, E. Filippov, C. Argiroffi, D. P. Higginson, S. Orlando, J. Béard, M. Blecher, M. Borghesi, K. Burdonov, D. Khaghani, K. Naughton, H. Pépin, O. Portugall, R. Riquier, R. Rodriguez, S.N. Ryazantsev, I.Yu. Skobelev, A. Soloviev, O. Willi, S. Pikuz, A. Ciardi, J. Fuchs, "Laboratory unravelling of matter accretion in young stars" // **Science Advances** 3, 11 (2017)

[8] A. Sladkov, C. Fegan, W. Yao, A. F. A. Bott, S. N. Chen, H. Ahmed, E. D. Filippov, R. Leli èvre, P. Martin, A. McIlvenny, T. Waltenspiel, P. Antici, M. Borghesi, S. Pikuz, A. Ciardi, E. d' Humi ères, A. Soloviev, M. Starodubtsev and J. Fuchs "Saturation of the compression of two interacting magnetic flux tubes evidenced in the laboratory" // **Nature Communications** 15, 10065 (2024)

[9] M. Sciscio, G. Petringa, Z. Zhu, M. Rodrigues, M. Alonzo, P. Andreoli, F. Filippi, F. Consoli, M. Huault, D. Raffestin, D. Molloy, H. Larreur, D. Singappuli, T. Carriere, C. Verona, P. Nicolai, A. McNamee, M. Ehret, E. Filippov, R. Lera, J. A. Perez Hernandez, S. Agarwal, M. Krupka, S. Singh, V. Istokskaia, D. Lattuada, M. La Cognata, L. Guardo, S. Palmerini, G. Rapisarda, K. Batani, M. Cipriani, G. Cristofari, E. Di Ferdinando, G. Di Giorgio, R. De Angelis, D. Giulietti, X. Jun, L. Volpe,

M. D. R. Frias, L. Giuffrida, D. Margarone, D. Batani, P. Cirrone, A. Bonasera, and F. Consoli. Laser initiated p-11B fusion reactions in petawatt high-repetition-rate laser facilities // **Matter and Radiation at Extremes** 10, 037402 (2025)

[10] J. L. Henares, M. Ehret, J. Imanol Apiñaniz, C. Salgado, J. A. Pérez-Hernández, M. L. Berlanga, A. M. Cives, E. Filippov, E. García-García, R. Hernández Martín, D. de Luis, P. Puyuelo-Valdes, I. Rodríguez-Pérez, M. D. Rodríguez Frías, I.-M. Vladisavlevici and G. Gatti. High-repetition-rate 1 Hz solid-density tape target delivery system for ultra-intense laser-matter interaction at PW-class laser facilities // **High Power Laser Science and Engineering**, 12, e94 (2024)

## *Other scientific contributions:*

**INVITED LECTURES:**

- PLASMA 2025 Conference, 15-19 September 2025, IPPLM, Warsaw, Poland.
- HB11 web-seminar co-organized by PROBONO and HB11 Energy, 27th February 2025
- GSI Plasma Physics seminar series, Darmstadt, November 5, 2024
- 20th International Workshop Complex Systems of Charged Particles and Their Interactions with Electromagnetic Radiation, Moscow, Russia, April 8-12, 2024
- 18th International Workshop "Complex Systems of Charged Particles and Their Interactions with Electromagnetic Radiation", April 11-13 2022, GPI RAS, Moscow, Russia
- International Conference on High Energy Density Science 2020 (HEDS2020), 20-24 April 2020, Pacifico Yokohama, Japan
- Complex Systems of Charged Particles and their Interactions with Electromagnetic Radiation 2019, March 25-27 2019, GPI RAS, Moscow, Russia
- Complex Supersonic Plasma Flows with Astrophysical Relevance in Laser Plasma", Complex Systems of Charged Particles and Their Interactions with Electromagnetic Radiation, Moscow, Russia, April 5-7, 2017

- **REVIEWER:**

**Communications Physics** (2024, IF=5.5)