Список публикаций к.ф.-м.н., старшего научного сотрудника

ККТЭиПТ НИЦ «Курчатовский институт»

Хабанова Филиппа Олеговича (Filipp/Philipp Khabanov)

1. V. A. Krupin, M. R. Nurgaliev, A. R. Nemets, I. A. Zemtsov, **P. O. Khabanov**, M. A. Drabinskiy, S. E. Lysenko, A. V. Melnikov, T. B. Myalton, D. S. Sergeev, N. A. Solovev, D. V. Sarychev, D. V. Ryjakov, S. N. Tugarinov, and N. N. Naumenko.
   Parametric dependencies of anomalous ion heat conductivity in T-10 plasma with Ohmic heating
   (2022) Phys. Plasmas 29, 062508
   DOI: 10.1063/5.0095520

2. Melnikov, A.V., Eliseev, L.G., Barcala, J.M., Cappa A., Chmyga, A, Drabinskij, M.A., Hidalgo, C., **Khabanov, P.**, Kharchev, N.K., Kozachek, A., Liniers, M., Lopez-Bruna, D., Losada, U., Lysenko, S.E., Medina, F., Molinero, A., Ochando, M., de Pablos, J.L., Pastor, I.
   2D distributions of potential and density mean-values and oscillations in the ECRH and NBI plasmas at the TJ-II stellarator
   (2022) Plasma Physics and Controlled Fusion, 64 (5) 054009
   DOI: 10.1088/1361-6587/ac5b4c

3. Drabinskiy, M.A., Melnikov, A.V., Eliseev, L.G., **Khabanov, P.O.**, Kharchev, N.K., Lysenko, S.E.
   Quasi-coherent mode evolution in discharges with positive radial electric field at the T-10 tokamak
   (2021) Journal of Physics: Conference Series, 2055 (1), 012001
   DOI: 10.1088/1742-6596/2055/1/012001

4. Eliseev, L.G., Melnikov, A.V., Ascasibar, E., Cappa, A., Drabinskiy, M., Hidalgo, C., **Khabanov, P.O.**, Kharchev, N.K., Kozachek, A.S., Liniers, M., Lysenko, S.E., Ochando, M., Pablos, J.L.D., Pastor, I., Sharapov, S.E., Spong, D.A., Breizman, B.N., Varela, J.
   Experimental observation of the geodesic acoustic frequency limit for the NBI-driven Alfvén eigenmodes in TJ-II
   (2021) Physics of Plasmas, 28 (7), 072510
   DOI: 10.1063/5.0049225

5. Riggs, Greg A., Nogami, S.H., Koepke, M.E., Melnikov, A.V., Eliseev, L.G., Lysenko, S.E., **Khabanov, P.O.**, Drabinskij, M.A., Kharchev, N.K., Kozachek, A.S., Ufimtsev, M.V., HIBP Team.
   Bispectral analysis of broadband turbulence and geodesic acoustic modes in the T-10 tokamak
   (2021) Journal of Plasma Physics, 87 (3), 885870301
   DOI: 10.1017/S0022377821000490

6. Lopez-Bruna, D., Gutierrez-Tapia, C., Martinell, J.J., Melnikov, A.V., Eliseev, L.G., **Khabanov, Ph.O.**, Pastor, I., Tafalla, D.
   Plasma electric potential in the TJ-II stellarator: Neoclassical formulation versus measurements
   (2021) Problems of Atomic Science and Technology, Series Thermonuclear Fusion, 44 (1), pp. 91-105.
   DOI: 10.21517/0202-3822-2021-44-1-91-105

7. Sharma, R., **Khabanov, P.O.**, Melnikov, A.V., Hidalgo, C., Cappa, A., Chmyga, A., Eliseev, L.G., Estrada, T., Kharchev, N.K., Kozachek, A.S., Krupnik, L.I., Malaquias, A., Van Milligen, B., Molinero, A., De Pablos, J.L., Pastor, I., Zenin, V.N.

Measurements of 2D poloidal plasma profiles and fluctuations in ECRH plasmas using the heavy ion beam probe system in the TJ-II stellarator
(2020) Physics of Plasmas, 27 (6), 062502
DOI: 10.1063/1.5142996

8. Melnikov, A.V., Eliseev, L.G., Grashin, S.A., Drabinskiy, M.A., **Khabanov, P.O.**, Kharchev, N.K., Krupin, V.A., Lysenko, S.E., Nemets, A.R., Nurgaliev, M.R., Ryzhakov, D.A., Shurygin, R.V., Soloviev, N.A., Vershkov, V.A., and T-10 team
Evolution of the electric potential and turbulence in OH and ECRH low-density plasmas at the T-10 tokamak
Synopsis to 28th IAEA Fusion Energy Conf. (FEC 2020)

9. **Khabanov, P.O.**, Melnikov, A.V., Minaev, V.B., Komarov, A.D.
Heavy ion beam probing conceptual design for the GLOBUS-M2 tokamak
(2020) Problems of Atomic Science and Technology, 130 (6), pp. 195-199.
DOI: 10.46813/2020-130-195

10. Ilin, A.M., **Khabanov, P.O.**, Melnikov, A.V.
Probing ion trajectory simulations for the HIBP diagnostics at the T-15MD tokamak
(2019) Journal of Physics: Conference Series, 1383 (1), 012006,
DOI: 10.1088/1742-6596/1383/1/012006

11. Drabinskiy, M.A., Eliseev, L.G., **Khabanov, P.O.**, Melnikov, A.V., Kharchev, N.K., Sergeev, N.S., Grashin, S.A.
Radial structure of quasi-coherent mode in ohmic plasma of the T-10 tokamak
(2019) Journal of Physics: Conference Series, 1383 (1), 012004
DOI: 10.1088/1742-6596/1383/1/012004

12. Drabinskiy, M.A., Melnikov, A.V., **Khabanov, P.O.**, Eliseev, L.G., Kharchev, N.K., Ilin, A.M., Sarancha, G.A., Vadimov, N.A.
Conceptual design of the heavy ion beam probe diagnostic for the T-15MD tokamak
(2019) Journal of Instrumentation, 14 (11), C11027
DOI: 10.1088/1748-0221/14/11/C11027

13. **Khabanov, P.O.**, Eliseev, L.G., Melnikov, A.V., Drabinskiy, M.A., Hidalgo, C., Kharchev, N.K., Chmyga, A.A., Kozachek, A.S., Pastor, I., De Pablos, J.L., Cappa, A., Shevelko, V.P.
Density profile reconstruction using HIBP in ECRH plasmas in the TJ-II stellarator
(2019) Journal of Instrumentation, 14 (9), C09033
DOI: 10.1088/1748-0221/14/09/C09033

14. Melnikov, A.V., Drabinskiy, M.A., Eliseev, L.G., **Khabanov, P.O.**, Kharchev, N.K., Krupnik, L.I., De Pablos, J.L., Kozachek, A.S., Lysenko, S.E., Molinero, A., Igonkina, G.B., Sokolov, M.M.
Heavy ion beam probe design and operation on the T-10 tokamak
(2019) Fusion Engineering and Design, 146, pp. 850-853
DOI: 10.1016/j.fusengdes.2019.01.096

15. Vershkov, V.A., Buldakov, M.A., Subbotin, G.F., Shelukhin, D.A., Melnikov, A.V., Eliseev, L.G., Kharchev, N.K., **Khabanov, P.O.**, Drabinskiy, M.A., Sergeev, D.S., Myalton, T.B., Trukhin, V.M., Gorshkov, A.V., Belbas, I.S., Asadulin, G.M.
3D structure of density fluctuations in the T-10 tokamak and new approach for current profile estimation

(2019) Nuclear Fusion, 59 (6), 066021
DOI: 10.1088/1741-4326/ab15b1

16. Melnikov, A.V., Drabinskiy, M.A., Eliseev, L.G., **Khabanov, P.O.**, Kharchev, N.K., Lysenko, S.E.
Studies of poloidal rotation of plasma density turbulence with HIBP in the T-10 tokamak
(2019) 46th EPS Conference on Plasma Physics, EPS 2019

17. Koepke, M.E., Nogami, S.H., Riggs, G.A., Melnikov, A.V., Eliseev, L.G., Lysenko, S.E., **Khabanov, P.O.**, Drabinskij, M.A., Kharchev, N.K., Kozachek, A.S., Ufimtsev, M.V., HIBP Team Team
Bispectral analysis of broadband and quasi-coherent oscillations (geodesic-acoustic modes) to interpret wave-wave interactions in the T-10 Tokamak
(2019) APS Division of Plasma Physics Meeting Abstracts, NO4. 007

18. Chmyga, O.O., Ascasibar, E., Barcala, J., Drabinskiy, M.A., Eliseev, L.G., Hidalgo, C., **Khabanov, P.O.**, Khrebtov, S.M., Komarov, O.D., Kozachok, O.S., Krupnik, L.I., Lysenko, S.E., Melnikov, A.V., Molinero, A., de Pablos, J.L., Perfilov, S.V., Zenin, V.N.
A dual heavy ion beam probe diagnostic on the TJ-II stellarator
(2019) Problems of Atomic Science and Technology, 119 (1), pp. 248-251

19. McCarthy, K.J., Panadero, N., Combs, S.K., Tamura, N., Ascasibar, E., Calvo, M., Chmyga, A., Estrada, T., Fontdecaba, J.M., Garcia, R., Hernández Sánchez, J., **Khabanov, P.**, Liners, M., Melnikov, A.V., Pastor, I., Rojo, B., TJ-II team and LHD experiment group
The impact of fast electrons on pellet injection in the stellarator TJ-II
(2019) Plasma Physics and Controlled Fusion, 61 (1), 014013
DOI: 10.1088/1361-6587/aae038

20. Melnikov, A.V., Krupnik, L.I., Ascasibar, E., Cappa, A., Chmyga, A.A., Deshko, G.N., Drabinskij, M.A., Eliseev, L.G., Hidalgo, C., **Khabanov, P.O.**, Khrebtov, S.M., Kharchev, N.K., Komarov, A.D., Kozachek, A.S., Lysenko, S.E., Molinero, A., De Pablos, J.L., Ufimtsev, M.V., Zenin, V.N.
ECRH effect on the electric potential and turbulence in the TJ-II stellarator and T-10 tokamak plasmas
(2018) Plasma Physics and Controlled Fusion, 60 (8), 084008
DOI: 10.1088/1361-6587/aac97f

21. **Khabanov, P.O.**, Eliseev, L.G., Khartchev, N.K., Hidalgo, C., Kozachek, A.S., Krupnik, L.I., lysenko, S.E., Melnikov, A.V., Chmyga, A.A., Deshko, G.N., Khrebtov, S.M., Komarov, A.D., Molinero, A., de Pablos, J.L., Team, T.-I., TJ-II team
The study of the radial location of quasi-coherent modes by heavy ion beam probe in the TJ-II stellarator
(2018) Problems of Atomic Science and Technology, 118 (6), pp. 317-320

22. Zenin, V.N., Drabinskij, M.A., Eliseev, L.G., Grashin, S.A., **Khabanov, P.O.**, Kharchev, N.K., Krupnik, L.I., Melnikov, A.V.
Plasma potential correlations between heavy ion beam probe and langmuir probe on the T-10 tokamak
(2018) Problems of Atomic Science and Technology, 118 (6), pp. 321-323

23. Sharma, R., **Khabanov, P.O.**, Melnikov, A.V., Kharchev, N.K., Sánchez, E., Chmyga, A.A., Deshko, G.N., Eliseev, L.G., Hidalgo, C., Khrebtov, S.M., Komarov, A.D., Kozachek, A.S.,

Krupnik, L.I., Malaquias, A., Van Milligen, B., Molinero, A., De Pablos, J.L., Pastor, I., Zenin, V.N.
Poloidal 2D scans to investigate potential and density profiles in the TJ-II stellarator using heavy ion beam probe
(2018) 45th EPS Conference on Plasma Physics, EPS 2018, 2018-July, pp. 1576-1579

24. Zenin, V.N., Drabinskij, M.A., Eliseev, L.G., Grashin, S.A., **Khabanov, P.O.**, Kharchev, N.K., Melnikov, A.V.
The study of long range electric potential correlation on the GAM frequency on the T-10 tokamak
(2018) 45th EPS Conference on Plasma Physics, EPS 2018, 2018-July, pp. 845-848

25. Eliseev, L.G., Melnikov, A.V., Lysenko, S.E., **Khabanov, P.O.**, Zenin, V.N., Drabinskij, M.A., Kharchev, N.K., Kozachek, A.S., Krupnik, L.I., HIBP Team
Evaluation of turbulent particle flux by heavy ion beam probe in the T-10 tokamak
(2018) Plasma and Fusion Research, 13, 3402106
DOI: 10.1585/PFR.13.3402106

26. Melnikov, A.V., Eliseev, L.G., Grashin, S.A., Drabinskij, M.A., **Khabanov, P.O.**, Kharchev, N.K., Krupnik, L.I., Kozachek, A.S., Lysenko, S.E., Zenin, V.N., HIBP Team
GAM and broadband turbulence structure in OH and ECRH plasmas in the T-10 tokamak
(2018) Plasma and Fusion Research, 13, 3402109
DOI: 10.1585/PFR.13.3402109

27. F.O. Khabanov
Numerical Analysis of the Locality of Measurements of Plasma Density Fluctuations Using Heavy Ion Beam Probing
(2018) Comp. nanotechnol., Issue 1, Pages 25-30

28. Melnikov, A.V., Hidalgo, C., Krupnik, L.I., Ascasibar, E., Cappa, A., Chmyga, A.A., Deshko, G.N., Drabinskij, M.A., Eliseev, L.G., **Khabanov, P.O.**, Khrebtov, S.M., Kharchev, N.K., Komarov, A.D., Kozachek, A.S., Lysenko, S.E., Depablos, J.L., Zenin, V.N., Zhezhera, A.I.
ECRH effect on the electric potential in toroidal plasmas (Overview of recent T-10 tokamak and TJ-II stellarator results)
(2017) EPJ Web of Conferences, 149, 03009
DOI: 10.1051/epjconf/201714903009
29. Melnikov, A.V., Krupnik, L.I., Eliseev, L.G., Barcala, J.M., Bravo, A., Chmyga, A.A., Deshko, G.N., Drabinskij, M.A., Hidalgo, C., **Khabanov, P.O.**, Khrebtov, S.M., Kharchev, N.K., Komarov, A.D., Kozachek, A.S., Lopez, J., Lysenko, S.E., Martin, G., Molinero, A., De Pablos, J.L., Soleto, A., Ufimtsev, M.V., Zenin, V.N., Zhezhera, A.I., T-10 Team
Heavy ion beam probing - Diagnostics to study potential and turbulence in toroidal plasmas
(2017) Nuclear Fusion, 57 (7), 072004
DOI: 10.1088/1741-4326/aa5382

30. Melnikov, A.V., Krupnik, L.I., Barcala, J.M., Bravo, A., Chmyga, A.A., Deshko, G.N., Drabinskij, M.A., Eliseev, L.G., Hidalgo, C., **Khabanov, P.O.**, Kharchev, N.K., Komarov, A.D., Kozachek, A.S., Khrebtov, S.M., Lopez, J., Lysenko, S.E., Molinero, A., de Pablos, J.L., Ufimtsev, M.V., Zenin, V.N., Zhezhera, A.I.
Heavy ion beam probing – A tool to study geodesic acoustic modes and alfven eigenmodes in the T-10 tokamak and TJ-II stellarator
(2017) Problems of Atomic Science and Technology, 107 (1), pp. 237-240

31. Hidalgo, C., Chmyga, A., Chercoles, J., Deshko, G.N., Eliseev, L.G., **Khabanov, P.O.**, Khrebtov, S.M., Komarov, A.G., Kozachek, A.S., Krupnik, L.I., Liu, B., Lopez, J., Losada, U., Martin, G., Melnikov, A.V., van Milligen, B., Molinero, A., de Pablos, J.L., Sánchez, E.
On the influence of ECRH on neoclassical and anomalous mechanisms using a dual heavy ion beam probe diagnostic in the TJ-II stellarator
(2016) 26th IAEA Fusion Energy Conference, EXC /P7-44

32. Drabinskii, M.A., **Khabanov, P.O.**, Melnikov, A.V., Krupnik, L.I., Kozachek, A.S., Komarov, A.D., Zhezhera, A.I.
The upgraded heavy ion beam probe diagnostics on the T-10 tokamak
(2016) Journal of Physics: Conference Series, 747 (1), 012017
DOI: 10.1088/1742-6596/747/1/012017

33. Drabinskii, M.A., **Khabanov, F.O.**, Melnikov, A.V., Krupnik, L.I., Kozachek A.S., Komarov A.D., Zhezhera A.I.
Engineering aspects of modernization of heavy ion beam probe diagnostics on the T-10 tokamak
(2016) Problems of Atomic Science and Technology, Series Thermonuclear Fusion, 39 (2), pp 81-90
DOI: 10.21517/0202-3822-2016-39-2-81-90