



11th INTERNATIONAL CONFERENCE

“FUNDAMENTAL AND APPLIED PROBLEMS OF MODERN PHYSICS”
Dedicated to 110th Anniversary of Academician S.A. Azimov

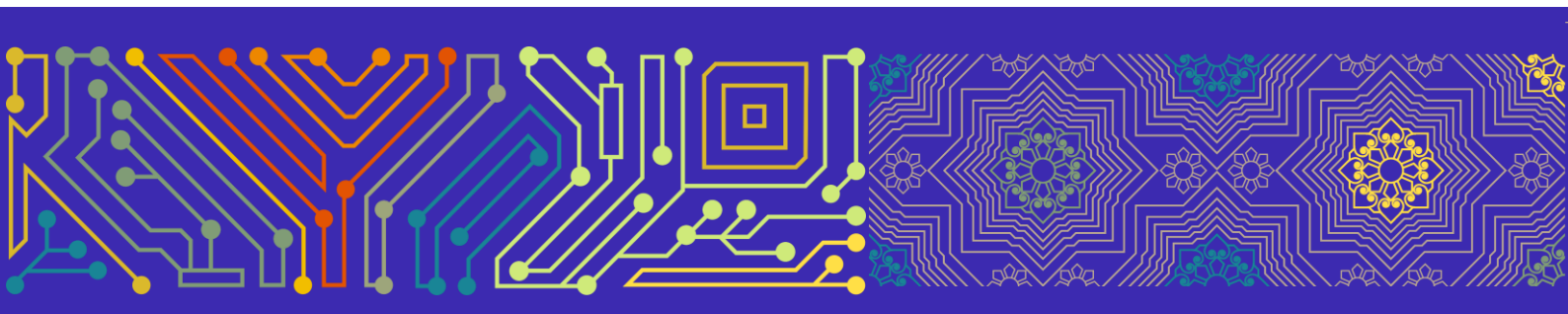
October 16-18, 2025, Tashkent, Uzbekistan

PROGRAM



110

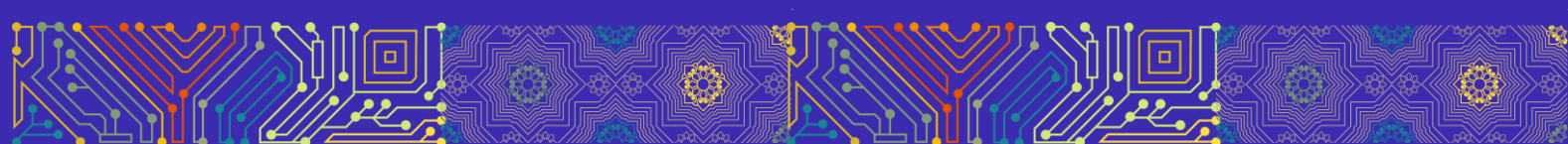
Organizer: S.A. Azimov Physical-Technical Institute of UzAS
Co-organizer: Institute of Materials Science of UzAS
Co-organizer: Council of Physicists of Uzbekistan



SCHEDULE OF THE CONFERENCE

October 16, Thursday	8:00 – 8:50	Registration of conference participants Entrance Hall of the S.A. Azimov Physical-Technical Institute of the Uzbekistan Academy of Sciences
	9:00 – 9:30	Departure (in bus and cars) from the Physical-technical Institute (Tashkent) to the Institute of Materials Science (Parkent)
	10:30 – 10:45	Arrival of conference participants at the Institute of Materials Science (Parkent)
	10:45 – 11:00	Group photo
	11:00 – 12:30	Official Opening ceremony of the Statue to Academician S.A. Azimov and excursion of the conference participants to the Big Solar Furnace of the Institute of Materials Science (Parkent, Tashkent region)
	12:30 – 13:30	Gala reception - LUNCH at the Institute of Materials Science
	13:30 – 17:00	In parallel with the Plenary Session: Poster session in the Hall of the Institute of Material Sciences of the UzAS
	13:30 – 15:20	Plenary sessions - 1
	15:20 – 15:55	Coffee break
	16:00 – 16:50	Plenary sessions - 2
	17:00	Departure from the Institute of Materials Science (Parkent) to the Physical-technical Institute (Tashkent)
	18:00	Arrival of conference participants at the Physical-technical Institute (Tashkent)
October 17, Friday	8:00 – 8:50	Registration, Entrance Hall of Uzbekistan Academy of Sciences (Tashkent)
	9:00 – 9:10	Conference opening at Conference Hall of Uzbekistan Academy of Sciences (Tashkent)
	9:10 – 11:30	Plenary sessions - 3
	11:30 – 11:50	Coffee break
	11:50 – 13:25	Plenary sessions - 4
	13:25	Departure (in bus and cars) from Uzbekistan Academy of Sciences to Zebu-Zar Restaurant
	13:40 – 15:20	Gala Reception - LUNCH, Restaurant Zebu-Zar
	15:30 – 17:30	In parallel with the Parallel Sessions: Poster session in the Hall of the S.A. Azimov Physical-Technical Institute of the UzAS
	15:30 – 16:30	Parallel sessions at PhTI of UzAS
	16:30 – 16:45	Coffee break
	16:45 – 17:15	Parallel sessions at PhTI of UzAS
October 18, Saturday	9:00 – 10:30	Parallel sessions at PhTI of UzAS
	10:30 – 10:50	Coffee break
	10:50 – 11:40	Parallel sessions at PhTI of UzAS
	12:00 – 13:00	Conference closing
		Group photo

Address of the organizing committee:
Chingiz Aytmatov str. 2B, 100084 Tashkent, Uzbekistan
S.A. Azimov Physical-Technical Institute of Uzbekistan Academy of Sciences
Reference point: “Hydrometcenter” bus stop
E-mail: fticonf@gmail.com, website: www.fti.uz
Phone: +998931890304



**PROGRAM OF THE 11th INTERNATIONAL CONFERENCE
“FUNDAMENTAL AND APPLIED PROBLEMS OF MODERN PHYSICS”,
October 16-18, 2025**

**First day, 16.10.2025 Venue – Institute of Materials Science of the
Uzbekistan Academy of Sciences
(Parkent, Tashkent region) 9:00-18:00**

<u>8:00 – 8:50</u>	<u>Registration of conference participants</u> <u>Entrance Hall of the S.A. Azimov Physical-Technical Institute of the</u> <u>Uzbekistan Academy of Sciences</u>
9:00 – 9:30	Departure of conference participants by buses and cars from the territory of the Physical-technical institute to the Institute of Materials Science
10:45 – 11:00	Arrival of conference participants at the Institute of Materials Science (Parkent, Tashkent region) Reception of guests

**OFFICIAL OPENING CEREMONY OF THE STATUE TO ACADEMICIAN S.A. AZIMOV
AT THE INSTITUTE OF MATERIALS SCIENCE (Parkent, Tashkent region)**

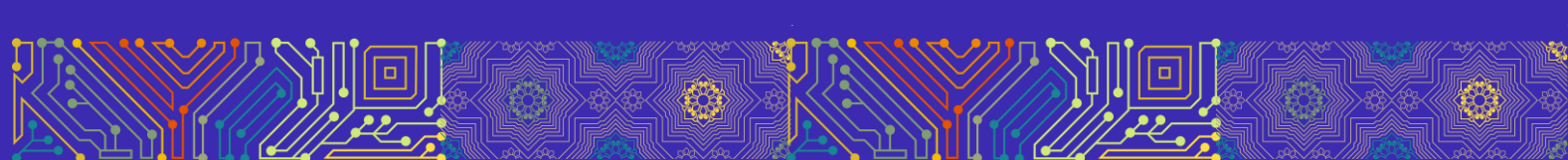
11:00 – 11:05	Opening ceremony Welcome speech by the Director of the Institute of Materials Science, <u>Odilkhuja Parpiev</u>
11:05 – 11:15	Greeting speech by the Hokim (Governor) of Parkent District, <u>Sardor Isakulov</u>
11:15 – 11:20	Speech by the President of the Uzbekistan Academy of Sciences, Academician <u>Shavkat Ayupov</u>
11:20 – 11:25	Unveiling of the monument National Anthem of the Republic of Uzbekistan* Laying flowers ceremony
11:25 – 11:30	Speech by the Chairman of the Academy of Arts of Uzbekistan, <u>Akmal Nur</u>
11:30 – 11:35	Speech by the Sculptor and Author of S.A. Azimov's statue, <u>Unus Safardiar</u>
11:35 – 11:40	Speech by Vice-President of the Russian Academy of Sciences, Academician <u>Vladislav Panchenko</u>
11:40 – 11:45	“Memories of the Mentor” – <u>Rustam Rakhimov</u>, Head of Laboratory, Institute of Materials Science
11:45 – 11:50	Speech by Doctor of Technical Sciences, <u>Ilkhom Pirmatov</u>
11:50 – 12:00	“The Big Solar Furnace through the Eyes of Youth” – <u>J. Mamanazirov</u> 1st year doctoral student, IMS
12:00 – 12:05	Speech by a family member of S.A. Azimov, <u>Bakhodir Azimov</u>
12:05 – 12:30	Familiarization with the “Big Solar Furnace” unique scientific facility
12:30 – 13:30	Gala reception - LUNCH at the Institute of Materials Science



PLENARY SESSION, 16.10.2025

Chairman – Odilkhuja Parpiev

13:30-13:40	Welcoming speech by the director of the Institute of Materials Science of the Uzbekistan Academy of Sciences <u>Odilkhuja Parpiev</u>
13:40-14:05	Big Solar Furnace and solar technologies: basic, fundamental and applied aspects <u>Sultan Suleymanov</u> Institute of Materials Science of the Uzbekistan Academy of Sciences, Parkent, Uzbekistan
14:05-14:30	О проекте БСП - Паркент <u>Абдурашид Яфасов</u> Старший научный сотрудник, Калининград, Россия
14:30-14:55	Определение потенциала солнечной и ветровой энергетики с использованием многокритериальной и многоэтапной методики с учетом климатических особенностей Таджикистана <u>Умархон Мадвалиев</u> Физико-технический институт имени С.У. Умарова НАН Таджикистана, Душанбе
14:55-15:20	Radiation-hardened SiC/Si heterostructures with embedded ¹⁴ C: a novel semiconductor platform for extreme-environment energy conversion <u>Mikhail Dolgoplov</u> Samara Polytechnic University, Samara, Russia
15:20-15:55	<u>Coffee Break</u>
16:00-16:25	Method for obtaining molecular hydrogen by decomposing hexane and a hexane-water mixture on the surface of nano-TiO ₂ under gamma radiation <u>Teymur Agayev</u> Institute of Radiation Problems of MSE of Azerbaijan
16:25-16:50	Влияние особенностей ядро-ядерных взаимодействий на развитие каскадных процессов <u>Анастасия Федосимова</u> Физико-технический институт, Satbayev University, Алматы, Казахстан
13:30-17:00	<u>In parallel with the Plenary Session: Poster session in the Hall of the Institute of Materials Science of the Uzbekistan Academy of Sciences</u>
17:00	Departure of conference participants by buses and cars from the territory of the Institute of Material Sciences (Parkent) to the Physical-technical institute (Tashkent)
18:00	Arrival of conference participants at the Physical-technical institute (Tashkent)



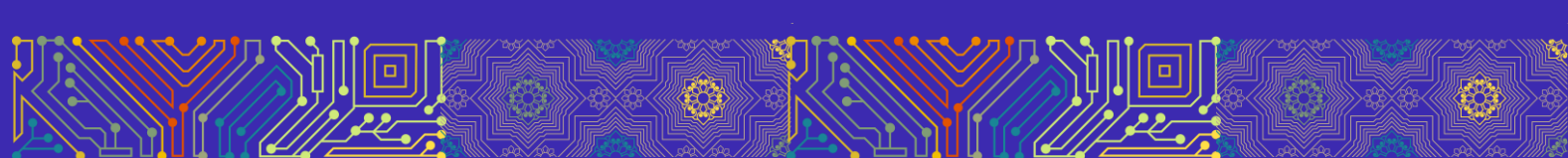
Second Day, 17.10.2025 Venue: Conference Hall of Uzbekistan Academy of Sciences (Tashkent)

8:00-8:50 – Registration of conference participants

PLENARY SESSION, 17.10.2025, 9:00-13:25

Chairman – Khusniddin Olimov

9:00-9:10	Conference opening. Welcoming speech by the President of the Uzbekistan Academy of Sciences <u>Shavkat Ayupov</u>
9:10-9:25	About Academician S.A. Azimov and S.A. Azimov Physical-technical Institute of the Uzbekistan Academy of Sciences, Director of S.A. Azimov Physical-technical Institute of the Uzbekistan Academy of Sciences <u>Khusniddin Olimov</u>
9:25-9:45	Speech by Vice-President of Russian Academy of Sciences <u>Vladislav Panchenko</u>
9:45-10:05	Speech by Academician of Russian Academy of Sciences <u>Alexander Shkurinov</u>
10:05-10:25	Streaming Instability in Chip Based Semiconductor Plasma: Quantum Mechanical Analysis <u>Mushtaq Ahmad</u> Faculty of Science, International Islamic University, Islamabad, Pakistan
10:25-10:45	Rational Design of HeteroStructured Photocatalyst System to Improve Hydrogen Production <u>Nuraje Nurxat</u>
10:45-11:05	School of Engineering and Digital Science, Nazarbayev University, Astana, Kazakhstan Формирование энергетических спектров (р,хр) и (р,х α) в реакциях на ^{27}Al при энергиях протонов 7.0, 22.0 и 30.0 МэВ <u>Тимур Жолдыбаев</u> Институт ядерной физики, Алматы, Казахстан
11:05-11:30	Investigation of the influence of external factors on molecular processes during electrodecomposition of polypropylene-based nanocomposites with nanoclay addition <u>Raida Ibayeva</u> Institute of Physics, Ministry of Science and Education of Azerbaijan, Baku, Azerbaijan
11:30-11:50	<u>Coffee Break</u> <u>Chairman – Bakhtiyor Baizakov</u>
11:50-12:10	Time characteristics of the NICA luminosity detector <u>Sergej Avdeyev</u> Joint Institute for Nuclear Research, Dubna, Russia
12:05-12:30	Pulsed laser-plasma multispectral source of electromagnetic radiation and charged particles on the base of supersonic gas-cluster jet <u>Alexei Balakin</u> Lomonosov Moscow State University, Moscow, Russia



12:30-12:50	Инженерно-технологический прорыв Узбекистана в XXI век <u>Абдурашид Яфасов</u> Старший научный сотрудник, Калининград, Россия
12:50-13:10	Monte Carlo simulation of X-Ray imaging radiocontrast enhancement <u>Ermuhammad Dushanov</u> Joint Institute for Nuclear Research, Dubna, Russia
13:10-13:25	Электронные микроскопы компании Jeol JEM-F200 и 120i <u>Александр Ильин</u> Interactive Corporation, Tokyo, Japan
13:40-15:20	<u>Gala reception - LUNCH at the Zebu-Zar restaurant</u>
15:30-17:30	<u>In parallel with the Parallel Sessions: Poster session in the Hall of the S.A. Azimov Physical-Technical Institute of the Uzbekistan Academy of Sciences</u>

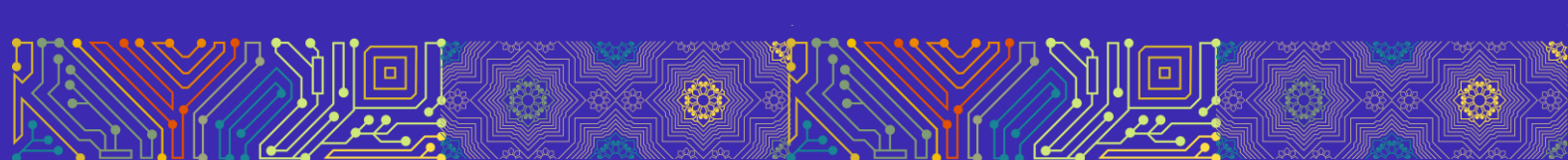
PARALLEL SESSION – Section 1
(Nuclear and elementary particle physics)

17.10.2025, 15:30-17:15

Venue: S.A. Azimov Physical-technical Institute of Uzbekistan Academy of Sciences (Tashkent)

Chairman – Kosim Olimov

15:30-15:40	Наблюдение выстроенностей в азимутально-быстротной матрице в центральных соударениях ядер серы с тяжелыми ядрами ядерной фото-эмульсии <u>Владимир Луговой</u> Физико-технический институт им. С.А. Азимова АН РУз, Ташкент, Узбекистан
15:40-15:50	Модель Давидова-Чабана с потенциалом Давидсона <u>Махмуджон Надирбеков</u> Institute of Nuclear Physics of Uzbekistan Academy of Sciences, Tashkent, Uzbekistan
15:50-16:00	Зависимость спектров переменной чётности жёсткого асимметричного ротатора от угловой переменной полярной координаты <u>Суннатилло Кудиратов</u> Институт ядерной физики Академии наук Узбекистана, Ташкент, Узбекистан
16:00-16:10	Three-Magnon Systems in the Heisenberg Model <u>Sadulla Tashpulatov</u> Institute of Nuclear Physics of Uzbekistan Academy of Sciences, Tashkent, Uzbekistan
16:10-16:20	Asymptotic normalization coefficients for $^{10}\text{Be}+n \rightarrow ^{11}\text{Be}$ from the peripheral $^{10}\text{Be}(d,p)^{11}\text{Be}$ reaction <u>Erkinjon Ikromkhonov</u> Institute of Nuclear Physics of Uzbekistan Academy of Sciences
16:20-16:30	Dosimetry Analysis of Cs-131 Loaded Biopolymer Granules in Radionuclide and X-Ray Based Hybrid Therapy of Breast Cancer Cells with Monte Carlo Simulations <u>Ahmet Ünlü</u> Antalya Bilim University, Medical Imaging Techniques, Antalya, Türkiye



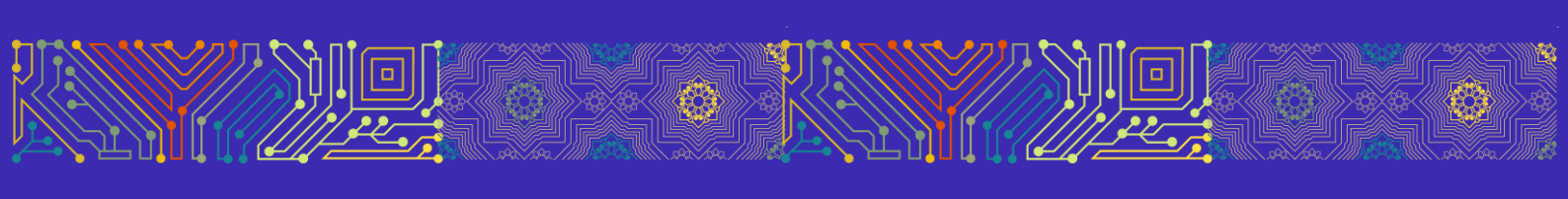
16:30-16:45	Coffee Break
<u>Chairman – Vladimir Lugovoi</u>	
16:45-16:55	Low cost nanoamperemeter based on switched integrator circuit <u>Alisher Temirzhanov</u> Institute of Nuclear Physics, Almaty, Kazakhstan
16:55-17:05	Исследование фазового перехода от адронной материи к кварк-глюонной плазме в p+Pb, Xe+Xe и Pb+Pb столкновениях на БАК <u>Азиза Кахорова</u> Самаркандский государственный университет имени Ш. Рашидова, Физико-технический институт имени С.А.Азимова АН РУз
17:05-17:15	Photoneutron and neutron reactions in nuclear astrophysics <u>Satimboy Polvonov</u> National University of Uzbekistan

PARALLEL SESSION - Section 2
(Physics of semiconductors and solids),
17.10.2025, 15:30-17:15

Venue: S.A. Azimov Physical-technical Institute of Uzbekistan Academy of Sciences (Tashkent)

Chairman – Oybek Abdulkhaev

15:30-15:40	Investigation of Transport and Magnetism in $\text{Ag}_8\text{Ge}_{1-x}\text{Mn}_x\text{Te}_6$ Solid Solutions <u>Aynur Gahramanova</u> Institute of Physics, Ministry of Science and Education, Azerbaijan, Baku, Azerbaijan
15:40-15:50	Effect of gamma irradiation on dielectric properties of composites based on polypropylene with a binary system CdS/ZnS <u>Sevinj Melikova</u> Academy of the Ministry of Emergency Situations of the Republic of Azerbaijan
15:30-15:40	Doping-Driven Evolution of Polaron Mass in YBCO <u>Sardorbek Otajonov</u> Nukus state pedagogical institute named after Ajiniyaz, Nukus, Uzbekistan
15:40-15:50	Self-focusing effect induced by a low-power laser in liquid crystals with hybrid reorientation <u>Mukhtor Egamov</u> Khujand Scientific Center, National Academy of Sciences of Tajikistan, Khujand, Tajikistan
15:50-16:00	Influence of monolayer thickness on optical properties of CdTe/ZnTe <u>Muratbay Sharibaev</u> Karakalpak State University, Uzbekistan
16:00-16:10	О проблемах радиационной деградации твердотельных электронных сложных систем <u>Султан Сүлейманов</u> Институт материаловедения Академии наук Республики Узбекистан, Ташкент, Узбекистан
16:10-16:20	Dependence of the negative magnetoresistance of GaMnAs epitaxial layers on Mn concentration <u>Pavel Parchinskiy</u> National University of Uzbekistan, Tashkent, Uzbekistan
16:20-16:30	Domain walls in two-component quantum gases <u>Bakhtiyor Baizakov</u> S.A. Azimov Physical-Technical Institute of the Uzbekistan Academy of Sciences, Tashkent, Uzbekistan



<u>16:30-16:45</u>	<u>Coffee Break</u>
	<u>Chairman – Bobur Ergashev</u>
16:45-16:55	Using Bethe Ansatz in the Lieb-Liniger Model for Cryptographic Applications <u>Mukhayo Rasulova</u> Institute of Nuclear Physics of Uzbekistan Academy of Sciences
16:55-17:05	Study of the formation process of hierarchical structures in tin dioxide films obtained by spray pyrolysis <u>Ekaterina Bondar</u> Institute of Physics and Technology, Almaty, Kazakhstan
17:05-17:15	Beyond Mean-Field Effects in the Dynamics of Bose–Einstein Condensates in a Two-Dimensional Double-Core Trap <u>Sherzod Otajonov</u> S.A. Azimov Physical-Technical Institute of the Uzbekistan Academy of Sciences, Tashkent, Uzbekistan

PARALLEL SESSION - Section 3

(Renewable energy sources, materials sciences and their applications), 17.10.2025 r., 15:30-17:15

Venue: S.A. Azimov Physical-technical Institute of Uzbekistan Academy of Sciences (Tashkent)

Chairman – Jasurjon Akhatov

15:30-15:40	Degradation of solar cells by ionizing radiation based on silicon double barriers nanostructures <u>Fakhraddin Pasha Abasov</u> Institute of Radiation Problems, Ministry of Science and Education of Azerbaijan
15:40-15:50	Gamma irradiation induced structural modifications of HDPE/GaAs composite films <u>Gunay Akhmedova</u> Institute of Physics, Ministry of Science and Education, Baku, Azerbaijan
15:50-16:00	Validation of ERA5 reanalysis against lidar measurements for wind resource assessment in mountainous terrain of Tajikistan <u>Umarkhon Madvaliev</u> S.U. Umarov Physical–Technical Institute, NAS of Tajikistan, Dushanbe
16:00-16:10	The role of solar panels in hydrogen gas production <u>Mirjalol Nosirov</u> Institute of Materials Science, Uzbekistan Academy of Sciences, Tashkent
16:10-16:20	Numerical modeling and calculation of the heat transfer coefficient in a flat channel using COMSOL Multiphysics <u>Azamat Shukurov</u> S.A. Azimov Physical-Technical Institute of the Uzbekistan Academy of Sciences, Tashkent, Uzbekistan
16:20-16:30	Study of the tribological characteristics of steel 20 after nitrocarburizing <u>Temirlan Alimbekuly</u> Research Center 'Surface Engineering and Tribology', East Kazakhstan University, Ust-Kamenogorsk, Kazakhstan
<u>16:30-16:45</u>	<u>Coffee Break</u>



Chairman – Rustam Rakhimov, Rustam Kabulov

16:45-16:55	Tribological Properties of Self-Fluxing Nickel-Containing Coatings Obtained by Gas-Flame Spraying <u>Gulim Tleubergenova</u> Research Center 'Surface Engineering and Tribology', East Kazakhstan University, Ust-Kamenogorsk, Kazakhstan
16:55-17:05	Early-stage assessment of thermal performance and retrofit options for Residential Buildings <u>Sayyora Asanova</u> S.A. Azimov Physical-Technical Institute of the Uzbekistan Academy of Sciences, Tashkent, Uzbekistan
17:05-17:15	Automation of assessment of the energy contribution of heliostats and the use of laser scanning of units in a large solar furnace with a thermal capacity of 1 MW <u>Javohir Shermatov</u> Institute of Materials Science of Uzbekistan Academy of Sciences, Tashkent, Uzbekistan

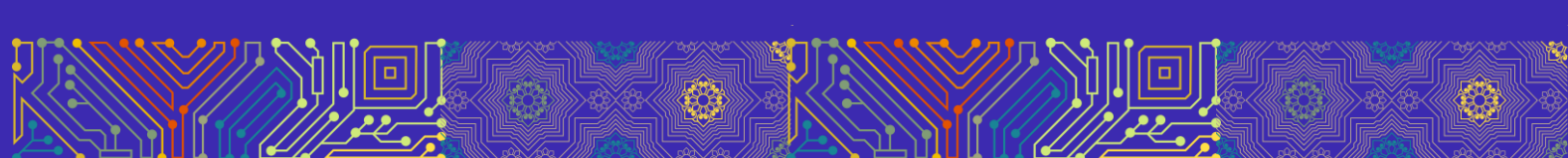
Third day, 18.10.2025 Venue: Physical-technical institute of the Uzbekistan Academy of Sciences (Tashkent)

**PARALLEL SESSION - Section 1
(Nuclear and elementary particle physics)**

18.10.2025 г., 9:00-10:30

Chairman – Vladimir Lugovoy

9:00-9:10	Расчет параметров химического замораживания в столкновениях Pb-Pb и Xe-Xe на БАК <u>Маратбек Шодмонов</u> Физико-технический институт им. С.А. Азимова АН РУз
9:10-9:20	Анализ спектров поперечного импульса заряженных адронов в протон-протонных столкновениях при $\sqrt{s} = 7$ и 13 ТэВ с использованием распределения Цаллиса <u>Кобил Мусаев</u> Физико-технический институт им. С.А. Азимова АН РУз
9:20-9:30	WIMS-based computational analysis of burnup-dependent macroscopic thermal-neutron absorption and fission cross-sections in IRT-4M fuel (19.75% U-235) and fission-product poisoning <u>Temurbek Fayziev</u> Institute of Nuclear Physics of the Uzbekistan Academy of Sciences, Tashkent, Uzbekistan
9:40-9:50	Evolution of transverse momentum spectra of primary charged particles produced in high-energy Pb+Pb collisions at the LHC with changing collision centrality <u>Khusniddin Olimov</u> Physical-Technical Institute of Uzbekistan Academy of Sciences
9:50-10:00	Monte Carlo method for testing the possibility of formation of excited nucleus $C13^*$ in the reaction $C12+n \rightarrow C13^* \rightarrow 3\alpha + n'$ <u>Bunyodjon Sindarov</u> Physical-Technical Institute of the Uzbekistan Academy of Sciences
10:00-10:10	Comparative analysis of $\delta(0)$ isobar production in $n^{12}C$ and $p^{12}C$ collisions at 4.2 GeV/c momentum <u>Gulmurot Khudoyberdiev</u> Physical-Technical Institute of the Uzbekistan Academy of Sciences



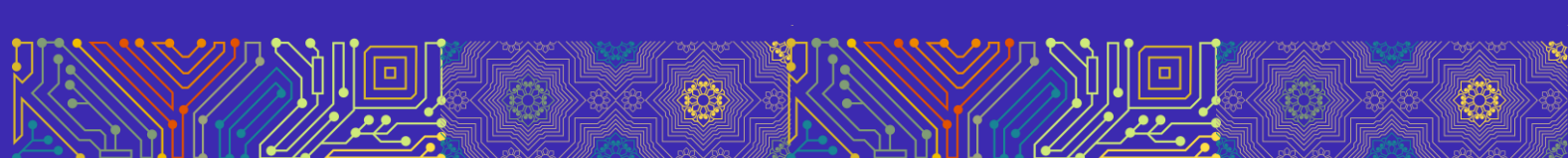
10:10-10:20	Energy and centrality dependence of average charged pions properties in p12C collisions at 4.2 and 9.9 GeV/c <u>Nuriddin Musurmonov</u> National University of Uzbekistan, Tashkent, Uzbekistan
10:20-10:30	Leading protons and average multiplicities of various types of particles produced in p–12C collisions at 9.9 GeV/c <u>Kosim Olimov</u> Physical-Technical Institute of the Uzbekistan Academy of Sciences
10:30-10:50	Coffee Break

PARALLEL SESSION - Section 2 (Physics of semiconductors)

18.10.2025 г., 9:00-12:10

Chairman – Usmonov Shukrullo

9:00-9:10	Research on the structure of the tungsten surface after helium plasma treatment <u>Yerassyl Naimankumaruly</u> Plasma Science LLP, Ust-Kamenogorsk, Kazakhstan
9:10-9:20	Photoemission and X-ray Electron Spectroscopies of Multicomponent Structures Based on Si <u>Sardor Eshboboyev</u> Karshi State University, Karshi, Uzbekistan
9:20-9:30	Modeling and optimization of Sb₂Se₃ thin-film solar cells using SCAPS-1D <u>Sherzod Bobomuradov</u> Physical-Technical Institute of the Uzbekistan Academy of Sciences
9:30-9:40	Плотность поверхностных состояний на границе раздела структуры-M(Al)-O(Al₂O₃)-P(CdTe) <u>Абатбай Утениязов</u> Каракалпакский Государственный университет им. Бердаха, Нукус, Узбекистан
9:40-9:50	Влияние асимметрии потенциала на динамику волновых пакетов в графене <u>Акмаль Гафуров</u> Институт материаловедения Академии наук Узбекистана, Ташкент, Узбекистан
9:50-10:00	Динамика волновых пакетов в графене с квадратными и треугольными потенциальными решётками <u>Мирзабек Авазов</u> Институт материаловедения Академии наук Узбекистана, Ташкент
10:00-10:10	Калибровка радиоизотопного уровнемера <u>Улугбек Ашрапов</u> Институт ядерной физики Академии наук Узбекистана, Ташкент
10:10-10:20	Делокализация на поверхности наночастиц кремния <u>Адил Мухтаров</u> Институт ядерной физики Академии наук Узбекистана, Ташкент



10:20-10:30	Morphological evolution of nikel-diffused polycrystalline silicon structures <u>Kanatbai Ismailov</u> Karakalpak State University named after Berdakh, Nukus
10:30-10:50	<u>Coffee Break</u>

Chairman – Bakhtiyor Baizakov, Kudrat Kuchkarov

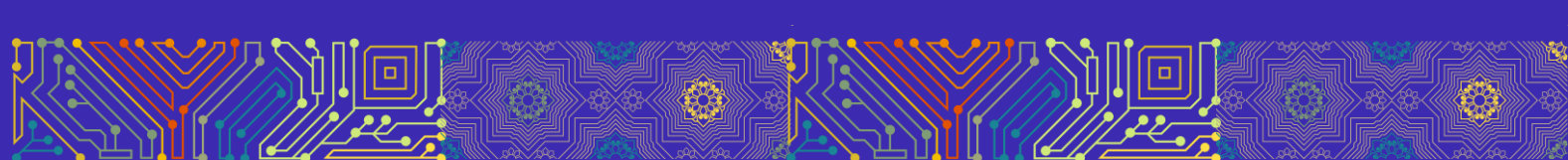
10:50-11:00	Особенности токовых характеристик солнечного элемента на основе CIGS:Ag <u>Рустам Кабулов</u> Физико-технический институт им. С.А. Азимова АН РУз
11:00-11:10	Structural, Morphological and Compositional Characteristics of Sb_xSe_y Thin Films <u>Mukhammad Pirimmatov</u> Physical-Technical Institute of the Uzbekistan Academy of Sciences
11:10-11:20	Формирование тонкоплёночного слоя ZrSi₂ методами очистки поверхности Si(111) <u>Жавохир Абдурахимов</u> Каршинский государственный университет, Узбекистан
11:20-11:30	Влияние кислородных термодоноров в подложках Si(111) на микроструктуру и функциональные свойства тонких пленок TiO₂ <u>Абдусаттор Нормаматов</u> Каршинский государственный университет, Узбекистан
11:30-11:40	Получение многослойного графена на каталитической подложке меди методом газофазного осаждения <u>Ойбек Турсункулов</u> Центр передовых технологий, MBCCI РУз, Ташкент

PARALLEL SESSION - Section 3 (Renewable energy sources)

18.10.2025, 9:00-12:10

Chairman – Shavkat Nurmatov, Jobir Ahadov

9:00-9:10	The role of polymer materials in solar thermal collectors <u>Ixtiyor Tuychiyev</u> Physical-Technical Institute, Uzbekistan Academy of Sciences, Tashkent
9:10-9:20	Finding the optimal tilt by using PVSYST and variation of angle by region <u>Ibrohim Ismoilov</u> Tashkent State Technical University named after Islam Karimov, Tashkent, Uzbekistan



9:20-9:30	Structural-Phase State and Tribological Properties of Steel 20 after Plasma Electrolytic Carburizing <u>Balym Alibekova</u> School of Engineering and Digital Science, Nazarbayev University, Astana, Kazakhstan
9:30-9:40	Rational Design of HeteroStructured Photocatalyst System to Improve Hydrogen Production <u>Nurxat Nuraje</u> School of Engineering and Digital Science, Nazarbayev University, Astana, Kazakhstan
9:40-9:50	Energy-efficient water desalination based on TFN membranes combined with renewable energy sources <u>Murodbek Kuralov</u> Physical-Technical Institute of the Uzbekistan Academy of Sciences, Tashkent, Uzbekistan
9:50-10:10	Method for obtaining molecular hydrogen by decomposing hexane and a hexane-water mixture on the surface of nano-TiO₂ under gamma radiation <u>Teymur Agayev</u> Institute of Radiation Problems of MSE of Azerbaijan
10:10-10:30	Fabrication and application of super hydrophobic membranes <u>Zheksenbek Toktarbai</u> Abai Kazakh National Pedagogical University, Almaty, Kazakhstan
10:30-10:50	<u>Coffee Break</u>
12:00-13:00	<u>Summing up and closing the conference in the conference hall of S.A. Azimov</u> <u>Physical-technical institute of the Uzbekistan Academy of Sciences</u>

Conference sponsors and partners:

