

36th International Physics Congress
Istanbul - Kadir Has University

1 SEPTEMBER 2020, TUESDAY

ATOMIC AND MOLECULAR PHYSICS

APPLIED PHYSICS

CONDENSED MATTER PHYSICS

ENERGY AND APPLICATIONS

HIGH ENERGY, PARTICLE AND PLASMA PHYSICS

MATERIAL SCIENCE AND APPLICATIONS

MATHEMATICAL PHYSICS, ASTROPHYSICS AND APPLICATIONS

MEDICAL PHYSICS AND APPLICATIONS

NUCLEAR PHYSICS

PHYSICS EDUCATION AND APPLICATIONS

TPS - 36

Turkish Physical Society
September 1 - 5, 2020

36th International Physics Congress
Istanbul - Kadir Has University

1 SEPTEMBER 2020, TUESDAY

HALL 1

Zoom informations for Hall 1

Zoom Meeting ID: 816 4876 7134

Zoom Meeting Passcode: 789777

- 09:00 – 11:00** **OPENING CEREMONY**
- 11:00 – 13:00** **CHAIR: M. Burçin ÜNLÜ**
- 11:00 – 11:30** **Franz J. GIESSIBL, University of Regensburg, Germany**
"Revealing the physics of chemical bonds by atomic force microscopy"
- 11:30 – 12:00** **Ekmel ÖZBAY, Bilkent University, Turkey**
"Strong Light–Matter Interaction in Lithography-free Metamaterial Perfect Absorbers: Energy conversion, color filtering, and sensing applications"
- 12:00 – 12:30** **Frank ZIMMERMANN, The European Organization for Nuclear Research (CERN), Switzerland**
"Future Circular Collider Study – Status and Plan"
- 12:30 – 13:00** **Gail ter HAAR, The Institute of Cancer Research, London,UK**
"Heat and bubbles, ultrasound for cancer therapy"
- 13:00 – 14:00** **BREAK**
- 14:00 – 18:00** **CHAIR: Nihat BERKER**
- 14:00 – 14:30** **Amirullah MAMEDOV, Bilkent University, Turkey**
"Topological Insulators: Theory and Application"
- 14:30 – 15:00** **Taner YILDIRIM, National Institute of Standards and Technology (NIST), USA**
"Pressure and Strain Control of Crystal Symmetry, Fermi Surface Reconstruction and Superconductivity in Weyl Semimetal MoTe₂"
- 15:00 – 15:30** **H. Eugene STANLEY, Boston University, USA**
"Econophysics: Using Statistical Physics Concepts to Offer Insights into Economic Questions"
- 15:30 – 16:00** **Feryal ÖZEL, University of Arizona, USA**
"Black Hole Physics with the Event Horizon Telescope"
- 16:00 – 16:30** **Burçin BAYRAM, Miami University, USA**
"Time-Resolved Optical Double Resonance Spectroscopy of Sodium Dimers"
- 16:30 – 17:00** **Artemis SPYROU, Michigan State University, USA,**
"Studying the synthesis of elements in the Universe via rare-isotope research"
- 17:00 – 17:30** **Laura MERSINI-HOUGHTON, North Carolina University, USA,**
"Is our Universe Fine-Tuned?"
- 17:30 – 18:00** **Surajit CHATTOPADHYAY, Amity University, Kolkata, India**
Discussion on Reconstruction Schemes of Modified Gravity Theories Based on Phenomenological Models of Dark Energy

TPS - 36

Turkish Physical Society
September 1 - 5, 2020

36th International Physics Congress
Istanbul - Kadir Has University

2 SEPTEMBER 2020 WEDNESDAY

HALL 1

Zoom informations for Hall 1

Zoom Meeting ID: 816 4876 7134

Zoom Meeting Passcode: 789777

09:30 – 13:00 CHAIR: Sehban KARTAL

09:30 – 10:00 İskender GÖKALP, Centre National de la Recherche Scientifique / French National Centre for Scientific Research (CNRS – ICARE), France
“When physics (and chemistry) meet engineering sciences for energy and environment challenges”

10:00 – 10:30 Mehmet ARIK, Özyeğin University, Turkey,
“Recent Challenges in The Thermal Management of Micro/Nano Electronics Systems: Why Engineers Desperately Needs Physicists for Ground Breaking Advancements”

10:30 – 11:00 Daniel SCHULTE, The European Organization for Nuclear Research (CERN), Switzerland,
“Muon Collider”

11:00 – 11:30 Hüseyin Ozan TEKİN, University of Sharjah, United Arab Emirates,
“Principles of Monte Carlo simulations for radiation transport and nuclear shielding studies in nuclear and medical physics: MCNPX experience”

11:30 – 12:00 Vasileios ZARIKAS, Nazarbayev University, Republic of Kazakhstan,
“Asymptotic Safety approach to quantum gravity and its astrophysical/cosmological consequences”

12:00 – 12:30 Orkide COŞKUNER WEBER, Turkish-German University, Turkey,
“Lacking Physics for Intrinsically Disordered Proteins”

12:30 – 13:00 Ruijiu CHEN, GSI Helmholtz Centre for Heavy Ion Research, Germany
“Measurement of the bound state β decay of bare $^{205}\text{Tl}^{81+}$ ions in the ESR Storage Ring”

13:00 – 14:00 BREAK

14:00 – 15:30 POSTER SESSION

CHAIR: TPS-36 ORGANIZING COMMITTEE: TPS-36 ORGANIZING COMMITTEE

01-PP: ATOMIC AND MOLECULAR PHYSICS

14: 00 – 14:15 Selçuk Çakmak

02-PP: APPLIED PHYSICS

14:15 – 14:30 Nursaç Kurt

14:30 – 14:45 Nursaç Kurt

06-PP: MATERIAL SCIENCE AND APPLICATIONS

14:45 – 15:00 Atilla Evcin

15:00 – 15:15 Büşra Dalkılıç

15:15 – 15:30 Emine Yaşar

TPS - 36

Turkish Physical Society
September 1 - 5, 2020

36th International Physics Congress
Istanbul - Kadir Has University

3 SEPTEMBER 2020, THURSDAY

HALL 1

Zoom informations for Hall 1

Zoom Meeting ID: 816 4876 7134

Zoom Meeting Passcode: 789777

09:30 – 13:00 CHAIR: İlkyay TÜRK ÇAKIR

09:30 – 10:00 Wolfgang QUINT, GSI Helmholtz Centre for Heavy Ion Research, Germany,
“Precision tests of fundamental physics with single particles in ion traps”

10:00 – 10:30 Avni AKSOY, Ankara University Institute of Accelerator Technologies, Turkey,
“The first national light source of Turkey for regional interest”

10:30 – 11:00 Gürkan ÖZTÜRK, Medipol University, Turkey,
“Using light to understand the life: optical tools to study cell biology”

11:00–11:30 Ali İhsan KILIÇ, Czech Academy of Sciences, Czech Republic,
“Investigation of a new micro-scale accelerator based on mesh materials as a nuclear research and technological applications”

11:30 – 12:00 Muhammad Imtiaz KHAN, Abbottabad University of Science and Technology, Pakistan,
“Magnetization dynamics in ferromagnetic nanostructures imaged by time-resolved photoemission electron microscopy”

12:00 – 12:30 Pierre-Michel HILLENBRAND, Goethe University, Germany,
“Dynamical processes in heavy-ion atom collisions”

12:30 – 13:00 Maxime MOUGEOT, The European Organization for Nuclear Research (CERN), Switzerland,
“Latest results from nuclear binding energy studies performed at ISOLTRAP”

13:00 – 14:00 BREAK

14:00 – 15:00 POSTER SESSION

CHAIR: TPS-36 ORGANIZING COMMITTEE: TPS-36 ORGANIZING COMMITTEE

01-PP: ATOMIC AND MOLECULAR PHYSICS

14:00 – 14:15 Sinem Gürkan Aydın

02-PP: APPLIED PHYSICS

14:15 – 14:30 Mustafa Büyükharman

14:30 – 14:45 Murat Çaydaşı

05-PP: HIGH ENERGY, PARTICLE AND PLASMA PHYSICS

14:45– 15:00 Bora Ketenöglu

TPS - 36

Turkish Physical Society
September 1 - 5, 2020

36th International Physics Congress
Istanbul - Kadir Has University

4 SEPTEMBER 2020, FRIDAY
HALL 1

Zoom informations for Hall 1

Zoom Meeting ID: 816 4876 7134

Zoom Meeting Passcode: 789777

09:30 – 12:30 POSTER SESSION

CHAIR: TPS-36 ORGANIZING COMMITTEE: TPS-36 ORGANIZING COMMITTEE

01-PP: ATOMIC AND MOLECULAR PHYSICS

09:30 – 09:45 Hatice Kılınç

09:45 – 10:00 Özgen Özge

02-PP: APPLIED PHYSICS

10:00 – 10:15 Ash Uğur Katmış

10:15 – 10:30 Ash Uğur Katmış

10:30 – 10:45 Bülent Dönmez

03-PP: CONDENSED MATTER PHYSICS

10:45 – 11:00 Seyfettin Ayhan

05-PP: HIGH ENERGY, PARTICLE AND PLASMA PHYSICS

11:00 – 11:15 Volkan Arı

11:15 – 11:30 Ashhan Çağlar

06-PP: MATERIAL SCIENCE AND APPLICATIONS

11:30 – 11:45 Hüseyin Özgür

11:45 – 12:00 İbrahim Cenk Yerligil

07-PP: MATHEMATICAL PHYSICS, ASTROPHYSICS AND APPLICATIONS

12:00 – 12:15 Duygu Demir Kızırmak

09-PP: NUCLEAR PHYSICS

12:15 – 12:30 Pelin Otansev



TPS - 36

Turkish Physical Society
September 1 - 5, 2020

36th International Physics Congress
Istanbul - Kadir Has University

HALL 2
ATOMIC AND MOLECULAR PHYSICS

TPS - 36

Turkish Physical Society
September 1 - 5, 2020

36th International Physics Congress
Istanbul - Kadir Has University

2 SEPTEMBER 2020, WEDNESDAY

HALL -2

ATOMIC AND MOLECULAR PHYSICS

Zoom informations for Hall 2

Zoom Meeting ID: 828 1395 4794

Zoom Meeting Passcode: 535264

15:30 – 17:30 CHAIR: TPS-36 ORGANIZING COMMITTEE:

15:30 – 15:45 FOLLOWING ELECTRON IMPACT EXCITATION OF SINGLE ^{84}Po , ^{85}At , ^{86}Rn , ^{87}Fr , ^{88}Ra , ^{89}Ac , ^{90}Th , ^{91}Pa , ^{92}U ATOMS N SUBHELL IONIZATION CROSS SECTIONS BY USING LOTZ'S EQUATIONS
Mahmut AYDINOL

15:45 – 16:00 FOLLOWING ELECTRON IMPACT EXCITATION OF SINGLE ^{78}Pt , ^{79}Au , ^{80}Hg , ^{81}Tl , ^{82}Pb , ^{83}Bi ATOMS N SUBHELL IONIZATION CROSS SECTIONS BY USING LOTZ'S EQUATIONS
Mahmut AYDINOL

16:00 – 16:15 COMPARISON OF THE QUANTUM CARNOT, OTTO AND STIRLING HEAT ENGINE CYCLES
Selçuk ÇAKMAK

16:15 – 16:30 CALCULATION OF PRESSURE VALUES AT CONNECTION POINT IN SHIPS BY AN OPTICAL METHOD
Semih ÖZTÜRK

16:30 – 16:45 A GENERAL SIMULATION OF QUANTUM FOURIER TRANSFORM FOR ALL QUANTUM SYSTEMS
Murat KURT

16:45 – 17:00 INVESTIGATION OF MULTI-ELECTRON SYSTEMS VIA THE HARTREE-FOCK METHOD
Sedanur KALECİK

17:00 – 17:15 ELEKTRON IMPACKT EXCITATION OF SINGLE (^{98}Cf , ^{99}Es , ^{100}Fm , ^{101}Md , ^{102}No , ^{103}Lr) ATOMS N AND N SUBSHELLS IONIZATION CROSS SECTION BY USING LOTZ'S EQUATIONS
Hikmet BOZKURT

17:15 – 17:30 MAGNETIC MULTIPOLE MOMENT OPERATORS AND INTEGRALS
Niyazi YÜKÇÜ

TPS - 36

Turkish Physical Society
September 1 - 5, 2020

36th International Physics Congress
Istanbul - Kadir Has University

3 SEPTEMBER 2020, THURSDAY
HALL - 2

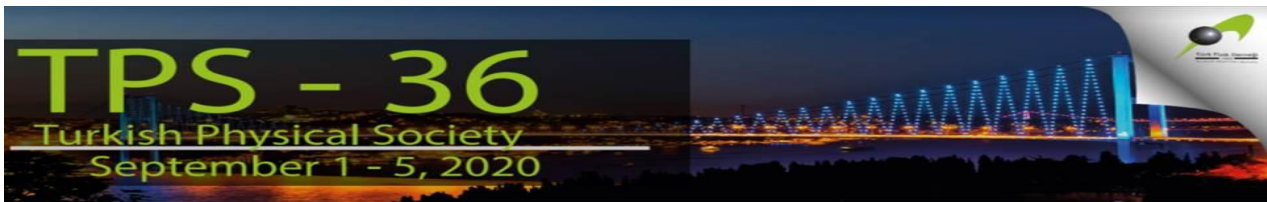
ATOMIC AND MOLECULAR PHYSICS

Zoom informations for Hall 2

Zoom Meeting ID: 828 1395 4794

Zoom Meeting Passcode: 535264

- 15:30 – 17:30 CHAIR: TPS-36 ORGANIZING COMMITTEE:**
- 15:30 – 15:45** CHARACTERIZATION OF NANOCRYSTALLINE SnO₂ THIN FILM FABRICATED BY SUCCESSIVE IONIC LAYER ADSORPTION AND REACTION (SILAR) TECHNIQUE FOR SOLAR CELL APPLICATION
Muhammed Emin GÜLDÜREN
- 15:45 – 16:00** DETERMINATION OF QUANTUM MECHANICAL PROPERTIES OF SOME SULFONAMIDE DERIVATIVES
Nuri YORULMAZ
- 16:00 – 16:15** INVESTIGATION OF DEFECT STRUCTURES OF HIGH-ELECTRON MOBILITY TRANSISTOR (HEMT) STRUCTURES WITH NITRIDE BUILDING BY DIFFERENT METHODS
Özlem BAYAL
- 16:15 – 16:30** COMPARISON OF DFT AND HARTREE-FOCK THEORIES IN THE CALCULATION OF ATOMIC FORM FACTORS. APPLICATION TO Ne ATOM
Melek ERASLAN
- 16:30 – 16:45** INVESTIGATION OF HYPERFINE STRUCTURE OF THE THULIUM ELEMENT IN THE VISIBLE REGION
Şeyma PARLATAN
- 16:45 – 17:00** CLASSIFICATION OF THE THULIUM SPECTRAL LINES IN THE VISIBLE REGION
Şeyma PARLATAN
- 17:00 – 17:15** SOLUTIONS OF GAUSSIAN WAVE PROPAGATION IN LINBO₃ NONLINEAR CRYSTALS
Gürkan ÇELİK
- 17:15 – 17:30** GENERATION OF HOLOGRAPHIC AIRY BEAMS USING A PHASE-ONLY SPATIAL LIGHT MODULATOR
Sündüz GÖKÇEN



36th International Physics Congress
Istanbul - Kadir Has University

4 SEPTEMBER 2020, FRIDAY

HALL – 2

ATOMIC AND MOLECULAR PHYSICS

Zoom informations for Hall 2

Zoom Meeting ID: 828 1395 4794

Zoom Meeting Passcode: 535264

- 15:30 – 17:15 CHAIR: TPS-36 ORGANIZING COMMITTEE:**
- 15:30 – 15:45** EXPERIMENTAL AND THEORETICAL SPECTRAL (FT-IR, RAMAN, UV-VIS AND NLO) ANALYSIS OF A POTENTIAL ANTIBIOTIC DRUG: CEFAZOLIN
Neslihan KAYA KINAYTÜRK
- 15:45 – 16:00** SnO₂ THIN FILMS PREPARED BY SUCCESSIVE IONIC LAYER ADSORPTION AND REACTION (SILAR) TECHNIQUE
Muhammed Emin GÜLDÜREN
- 16:00 – 16:15** MOLECULAR STRUCTURE, SPECTROSCOPIC (IR, NMR, UV-VIS) INVESTIGATIONS AND NON LINEAR OPTICAL (NLO) ANALYSIS OF HDAC INHIBITOR 2-(N-(2-HYDROXYPHENYL)-2-PROPYLPENTANAMIDE) WITH QUANTUM CHEMICAL CALCULATIONS
Tuğba GÖCEN
- 16:15 – 16:30** RESONANT ENHANCEMENT OF QUANTUM TRANSPORT IN WEAKLY COUPLED OPEN-SYSTEMS
Arzu KURT
- 16:30 – 16:45** MODIFICATION OF SURFACE PROPERTIES OF AL 2024 ALLOY BY USING NANOSECOND FIBER LASER
Ali GÜNERHAN
- 16:45 – 17:00** ELECTRON IMPACT EXCITATION OF SINGLE (⁹³Np, ⁹⁴Pu, ⁹⁵Am, ⁹⁶Cm, ⁹⁷Bk) ATOMS N AND N SUBSHELLS IONIZATION CROSS SECTION BY USING LOTZ'S EQUATIONS
Hikmet BOZKURT
- 17:00 – 17:15** DFT INVESTIGATIONS ON THE POTENTIAL NLO CHROMOPHORES CONTAINING THE 2- PHENYL-6-NITROBENZIMIDAZOLE GROUP
Özgen ÖZGE



TPS - 36

Turkish Physical Society
September 1 - 5, 2020

36th International Physics Congress
Istanbul - Kadir Has University

HALL 3
APPLIED PHYSICS

TPS - 36

Turkish Physical Society
September 1 - 5, 2020

36th International Physics Congress
Istanbul - Kadir Has University

2 SEPTEMBER 2020, WEDNESDAY

HALL - 3

APPLIED PHYSICS

Zoom informations for Hall 3

Zoom Meeting ID: 875 5118 1095

Zoom Meeting Passcode: 327855

15:30 – 17:15 **CHAIR: Arzu ÇİLLİ**

15:30 – 15:45 INVESTIGATION OF BIREFRINGENCE OF LYOTROPIC NEMATIC MESOPHASE UNDER MAGNETIC FIELD
Ozgur MASALCI

15:45 – 16:00 STATUS OF THE ULTRAFAST NONLINEAR OPTICS STATION OF TARLA FACILITY
Çağlar KAYA

16:00 – 16:15 DISTINCTIVE APPLICATIONS OF SYNCHROTRON RADIATION BASED X-RAY RAMAN SCATTERING SPECTROSCOPY
Didem KETENOĞLU

16:15 – 16:30 EFFECT OF ANNEALING TEMPERATURE ON PHASE FORMATION AND MAGNETOCALORIC PROPERTIES IN A RARE EARTH FREE HIGH ENTROPY ALLOY
Kağan ŞARLAR

16:30 – 16:45 TEMPERATURE DEPENDENT CHARACTERIZATION OF SnS/Si NANOWIRE DEVICE APPLICATION
Emre COŞKUN

16:45 – 17:00 ESTIMATES OF COLLECTIVE EFFECTS FOR FCC-ee PRE-BOOSTER RING
Özgür ETISKEN

17:00 – 17:15 THE EFFECT OF ELECTRONIC PROCESSES AND STRUCTURE PROPERTY RELATIONSHIP ON ELECTRONIC DEVICES IN HIGHLY STRAINED CARBON NANO BELTS
Gülsevim AYDIN

TPS - 36

Turkish Physical Society
September 1 - 5, 2020

36th International Physics Congress
Istanbul - Kadir Has University

3 SEPTEMBER 2020, THURSDAY

HALL - 3

APPLIED PHYSICS

Zoom informations for Hall 3

Zoom Meeting ID: 875 5118 1095

Zoom Meeting Passcode: 327855

15:30 – 17:45 **CHAIR: Mehmet YILMAZ**

15:30 – 15:45 DETERMINATION OF NATURAL RADIOACTIVITY IN SPECIAL RED PEPPER (ISOT) IN SANLIURFA, TURKEY
Yunus BABUR

15:45 – 16:00 A NOVEL HIGH-SPEED DATA SAMPLING SYSTEM DESIGN FOR SPACE RADIATION TESTING
Buğra KOCAMAN

16:00 – 16:15 TOTAL IONIZING DOSE (TID) AND DISPLACEMENT DAMAGE (DD) ANALYSES FOR CONCEPTUAL SATELLITES
Buğra KOCAMAN

16:15 – 16:30 LIGHT GUIDE TECHNOLOGY IN AUTOMOTIVE LIGHTING
Mehmet ERKUŞ

16:30 – 16:45 SINGLE-MODE IN-BAND PUMPED FIBER MOPA WITH AN OUTPUT POWER SCALING UP TO 4.62 kW
Büşra METE

16:45 – 17:00 PRODUCING THE GRAPHENE/P-SILICON SCHOTTKY JUNCTION SOLAR CELL AND INVESTIGATION THE EFFECT OF MULTI-LAYER GRAPHENE IN THIS CELL
Ala JEHAD

17:00 – 17:15 INVESTIGATION OF Mo-O THIN FILM WITH DIFFERENT RATIO OF W BY USING RF MAGNETRON SPUTTERING SYSTEM
Mustafa BÜYÜKHARMAN

17:15 – 17:30 CHARACTERIZATION OF THERMALLY EVAPORATED In₂S₃ FILMS FOR THIN FILM PHOTOVOLTAIC APPLICATIONS
Berkcan ERENLER

17:30 – 17:45 DESIGN AND CONSTRUCTION OF A PLASMA PROPULSION ENGINE: HALL THRUSTER
Selin ERTAN

TPS - 36

Turkish Physical Society
September 1 - 5, 2020

36th International Physics Congress
Istanbul - Kadir Has University

4 SEPTEMBER 2020, FRIDAY

HALL - 3

APPLIED PHYSICS

Zoom informations for Hall 3

Zoom Meeting ID: 875 5118 1095

Zoom Meeting Passcode: 327855

15:30 – 17:15 **CHAIR: Banu SÜNGÜ MISIRLIOĞLU**

15:30 – 15:45 TEMPERATURE DEPENDENT SURFACE TENSION OF NEMATIC CALAMITIC MESOPHASE FORMED BY POTASSIUM LAURATE-DECANOL-WATER SYSTEM
Aykut Evren YAVUZ

15:45 – 16:00 INVESTIGATION OF OPTICAL PROPERTIES OF PHANTOMS BY KUBELKA-MUNK FUNCTION APPROACH
Hüseyin Okan DURMUŞ

16:00 – 16:15 INVESTIGATION OF TEMPERATURE EFFECTS OF A LOW-LEVEL LASER SOURCE WITHIN THE MUSCLE PHANTOM
Hüseyin Okan DURMUŞ

16:15 – 16:30 PRODUCTION OF V2O5 DOPED SODA-SILICATE GLASSES WITH CLASSICAL MELT-QUENCHING TECHNIQUE AND PHYSICAL CHARACTERIZATION OF THESE OXIDE GLASSES
Sadiye ÇETİNKAYA ÇOLAK

16:30 – 16:45 NATURAL RADIOACTIVITY LEVELS IN SEDIMENT SAMPLES TAKEN FROM ŞAVŞAT'S BLACK LAKE IN ARTVİN
Esra BAL

16:45 – 17:00 CONTROL OF LASER RANGE FINDER SYSTEM WITH THE MENTAL TASK-BASED PATTERN RECOGNITION APPROACH
Caner GEZGEZ

17:00 – 17:15 PREPARATION AND ELECTRICAL PROPERTIES OF P-SI/AG NWS/CDS HETEROSTRUCTURES
Dilara Piriyeve



TPS - 36

Turkish Physical Society
September 1 - 5, 2020

36th International Physics Congress
Istanbul - Kadir Has University

HALL 4
CONDENSED MATTER PHYSICS

TPS - 36

Turkish Physical Society
September 1 - 5, 2020

36th International Physics Congress
Istanbul - Kadir Has University

2 SEPTEMBER 2020, WEDNESDAY

HALL - 4

CONDENSED MATTER PHYSICS

Zoom informations for Hall 4

Zoom Meeting ID: 835 7325 2736

Zoom Meeting Passcode: 404496

15:30 – 18:00 CHAIR: TPS-36 ORGANIZING COMMITTEE:

15:30 – 15:45 MONTE CARLO STUDY OF PEROVSKITES STRUCTURE FOR FERROMAGNETIC SPIN-1/2
Serkan GÜLDAL

15:45 – 16:00 THE EFFECT OF ALTERNATING ELECTRIC FIELD DIRECTION ON CARBON NANO-COATINGS FORMED WITH ECR PLASMA SYSTEM
Mustafa ESEN

16:00 – 16:15 ONE DIMENSIONAL STRUCTURES OF GOLD, SILVER AND COPPER ATOMS
Yelda KADIOĞLU

16:15 – 16:30 CORROSION PROPERTIES OF HIGH PRESSURE DIE CAST MG-4ZN-XLA (X= 0, 1, 2 AND 4 WT.%) ALLOYS CORROSION PROPERTIES OF HIGH PRESSURE DIE CAST MG-4ZN-XLA (X= 0, 1, 2 AND 4 WT.%) ALLOYS
Selma ÖZARSLAN

16:30 – 16:45 STUDY ON BASIC CHARACTERISTICS OF CU-BASED SHAPE MEMORY ALLOY
Nihan ÜNLÜ

16:45 – 17:00 EFFECT OF FILLERS (GO, rGO, ZnO) ON SHAPE MEMORY PROPERTIES OF POLYVINYL ALCOHOL (PVA) MATRİX NANOCOMPOSITE MATERIALS
Nihan ÜNLÜ

17:00 – 17:15 SnS THIN FILMS DEPOSITED BY ULTRASONIC SPRAY PYROLYSIS: STRUCTURAL, OPTICAL AND ELECTRICAL ANALYZES
İbrahim GÜNEŞ

17:15 – 17:30 STRUCTURAL, OPTICAL AND ELECTRICAL PROPERTIES OF CZTS LAYERS BY ULTRASONIC SPRAY PYROLYSIS FOR PHOTOVOLTAIC APPLICATIONS
İbrahim GÜNEŞ

17:30 – 17:45 EFFECT OF B4C ADDING ON NICOFEALMOTICR HIGH ENTROPY ALLOY
Pshdar Ahmed Ibrahim Ibrahim

17:45 – 18:00 SME OBSERVATIONS OF CU-AL BASED SMAS
Pshdar Ahmed Ibrahim Ibrahim

TPS - 36

Turkish Physical Society
September 1 - 5, 2020

36th International Physics Congress
Istanbul - Kadir Has University

3 SEPTEMBER 2020, THURSDAY
HALL - 4

CONDENSED MATTER PHYSICS

Zoom informations for Hall 4

Zoom Meeting ID: 835 7325 2736

Zoom Meeting Passcode: 404496

- 15:30 – 17:45 CHAIR: TPS-36 ORGANIZING COMMITTEE:**
- 15:30 – 15:45** ENZYME BASED GAS SENSOR FOR ORGANIC VAPOURS
Tayfun UZUNOĞLU
- 15:45 – 16:00** ELECTRICAL AND OPTICAL CHARACTERIZATION OF BIOSENSOR
Tayfun UZUNOĞLU
- 16:00 – 16:15** A CALCULATION STUDY IN MAB PHASE STAGES: ATOMIC LAMINATED, TRIPLE TRANSITION METAL BORIDES
Ülkü BAYHAN
- 16:15 – 16:30** DIELECTRIC PERFORMANCE ANALYSIS OF PHTHALOCYANINE AND QUANTUM DOT DOPED NEMATIC LIQUID CRYSTAL COMPOSITE STRUCTURES
Gülnur ÖNSAL
- 16:30 – 16:45** FIRST PRINCIPLES STUDY OF THE ELECTRONIC, MECHANIC AND VIBRATIONAL PROPERTIES OF M₄ALB₃ (M=V, Nb) MAX PHASES
Ayşenur GENCER
- 16:45 – 17:00** HYDROGEN STORAGE PROPERTIES OF Ca-DECORATED BC₃ SHEET
Esra EROĞLU
- 17:00 – 17:15** A STUDY ON THE DOSIMETRIC PROPERTIES OF POLYCARBOXYLATE CEMENT USED IN DENTAL TREATMENTS
MOHAMMED ALKHALDY
- 17:15 – 17:30** STRUCTURAL, ELECTRONIC AND ELASTIC PROPERTIES OF BODY CENTERED TETRAGONAL NPD₂GE₂
Talha ZAFER
- 17:30 – 17:45** ELECTRON-PHONON INTERACTION AND SUPERCONDUCTIVITY in LaPd₂Ge₂ by FIRST PRINCIPLES PSEUDOPOTENTIAL CALCULATION
Talha ZAFER

TPS - 36

Turkish Physical Society
September 1 - 5, 2020

36th International Physics Congress
Istanbul - Kadir Has University

4 SEPTEMBER 2020, FRIDAY

HALL - 4

CONDENSED MATTER PHYSICS

Zoom informations for Hall 4

Zoom Meeting ID: 835 7325 2736

Zoom Meeting Passcode: 404496

15:30 – 18:00 CHAIR: TPS-36 ORGANIZING COMMITTEE:

15:30 – 15:45 THEORETICAL INVESTIGATION OF SUPERCONDUCTIVITY IN THE Ta₃Ge
Ertuğrul KARACA

15:45 – 16:00 IN-PLANE ANISOTROPIC JANUS SINGLE LAYER BLACK ARSENIC-PHOSPHORUS:
ELECTRONIC, OPTICAL, VIBRATIONAL, AND ELASTIC PROPERTIES
Mehmet YAGMURCUKARDES

16:00 – 16:15 HYDROGEN STORAGE ON SC-DECORATED SINGLE-VACANCY PHOSPHORENE
İrem ALP

16:15 – 16:30 INVESTIGATION of MECHANICAL PROPERTIES and the ELECTRONIC and MAGNETIC
BEHAVIOR of SILVER-BASED FERRITE CHALCOGENIDES Ag₃FeCh₄ (Ch = S and Se)
Buğra YILDIZ

16:30 – 16:45 PHOTOLUMINESCENCE STUDY ON DY³⁺ DOPED MGB₄O₇ PHOSPHOR
Sera İFLAZOĞLU

16:45 – 17:00 SYNTHESIS, CHARACTERIZATION AND PHOTOLUMINESCENCE STUDIES OF
UNDOPED BORON PHOSPHATE
Sera İFLAZOĞLU

17:00 – 17:15 ROLE OF SUBSTRATE TEMPERATURE ON THE STRUCTURAL AND OPTICAL
PROPERTIES OF SPRAY DEPOSITED WO₃ THIN FILMS
Büşra TAŞKIRAN

17:15 – 17:30 NANOSIZED MONOLAYER ON THE SQUARE LATTICE WITHIN SPIN-1 ISING
MODEL: MAGNETIC PROPERTIES WITH ODD INTERACTIONS
Ramazan KAVLAK

17:30 – 17:45 APPLICATION OF SWANEPOEL METHOD FOR INGAN/GAN MQWS
Ahmet Kürşat BİLGİLİ

17:45 – 18:00 COATING PROPERTIES ON METAL SURFACES WITH NITROGEN AND FREE
NITROGEN DOPED CARBON FILMS BY USING ELECTRON CYCLOTRON
MICROWAVE PLASMA (ECR-MP) METHOD
Özlem ÇELİKEL



36th International Physics Congress
Istanbul - Kadir Has University

HALL 1
ENERGY AND APPLICATIONS

TPS - 36

Turkish Physical Society
September 1 - 5, 2020

36th International Physics Congress
Istanbul - Kadir Has University

5 SEPTEMBER 2020, SATURDAY

HALL - 1

ENERGY AND APPLICATIONS

Zoom informations for Hall 1

Zoom Meeting ID: 816 4876 7134

Zoom Meeting Passcode: 789777

09:30 – 11:00 CHAIR: TPS-36 ORGANIZING COMMITTEE:

09:30 – 09:45 FABRICATION OF NA₂/3MN₁/2FE₁/2O₂ COMPOSITION AND THE INVESTIGATION OF AL-SUBSTITUTION IN THE STRUCTURE: ELECTROCHEMICAL PERFORMANCE ANALYSIS

Sebahat ALTUNDAĞ

09:45 – 10:00 THE INVESTIGATION OF NEW MICRO-SCALE ACCELERATOR (MSTURKAC) BASED ON MESH MATERIALS AS A NUCLEAR RESEARCH AND TECHNOLOGICAL APPLICATIONS

Ali İhsan KILIÇ

10:00 – 10:15 AN INVESTIGATION OF BATTERY PERFORMANCE OF RU-MODIFIED LIFEPO₄ BATTERY CELL

Abdurrahman YOLUN

10:15 – 10:30 A TARGET DESIGN FOR ACCELERATOR DRIVEN SYSTEM

Shafiqa SAAIE

10:30 – 10:45 EFFICIENCY ANALYSIS OF PHOTOVOLTAIC SOLAR PANELS WITH MONOCRYSTALLINE AND POLYCRYSTALLINE

Sündüz GÖKÇEN

10:45 – 11:00 EFFECT OF PEROVSKITE STRUCTURE ON THE PERFORMANCE OF PEROVSKITE SOLAR CELLS

Cihangir KAHVECİ



36th International Physics Congress
Istanbul - Kadir Has University

HALL 5
HIGH ENERGY, PARTICLE AND PLASMA
PHYSICS

TPS - 36

Turkish Physical Society
September 1 - 5, 2020

36th International Physics Congress
Istanbul - Kadir Has University

2 SEPTEMBER 2020, WEDNESDAY

HALL - 5

HIGH ENERGY, PARTICLE AND PLASMA PHYSICS

Zoom informations for Hall 5

Zoom Meeting ID: 867 6294 2184

Zoom Meeting Passcode: 683839

15:30 – 17:45 **CHAIR: Erkan ÖZCAN**

15:30 – 15:45 MEASUREMENT OF INELASTIC, SINGLE- AND DOUBLE-DIFFRACTION CROSS SECTIONS IN PROTON-PROTON COLLISIONS AT THE LHC WITH ALICE
Ayben KARASU UYSAL

15:45 – 16:00 PROTON TEST-BEAM AT KAHVE LABORATORY AND ITS MICROWAVE DISCHARGE ION SOURCE
Aytül ADIGÜZEL

16:00 – 16:15 BEAM DIAGNOSTICS FOR LOW ENERGY PROTON BEAM
Duygu HALIS

16:15 – 16:30 STATUS OF DEMİRCİ-PRO BEAM-LINE DESIGN CODE
Orhan ÇAKIR

16:30 – 16:45 A GRAPHICAL USER INTERFACE TO DESIGN SOLENOID AND QUADRUPOLE MAGNETS WITH DEMİRCİ-PRO
Orhan ÇAKIR

16:45 – 17:00 160 KW L BAND MICROWAVE PULSE COMPRESSOR AT TARLA
Ozlem KARSLI

17:00 – 17:15 HPRF TESTS FOR COMMISSIONING TO PREPARE THE SCMS FOR FULL OPERATION @ TARLA
Ozlem KARSLI

17:15 – 17:30 SITE-TESTING OF 18 KW SOLID STATE POWER AMPLIFIER IN TARLA
Evrin ÇOLAK

17:30 – 17:45 PARAMETERISATION OF THE GAS GAIN CALCULATIONS
Özkan ŞAHİN

TPS - 36

Turkish Physical Society
September 1 - 5, 2020

36th International Physics Congress
Istanbul - Kadir Has University

3 SEPTEMBER 2020, THURSDAY

HALL - 5

HIGH ENERGY, PARTICLE AND PLASMA PHYSICS

Zoom informations for Hall 5

Zoom Meeting ID: 867 6294 2184

Zoom Meeting Passcode: 683839

15:30 – 17:30 **CHAIR: Orhan ÇAKIR**

15:30 – 15:45 MEASUREMENT OF LIGHT FLAVOR HADRONS WITH ALICE AT THE LHC
Serpil YALÇIN KUZU

15:45 – 16:00 STUDY OF RESCATTERING EFFECTS IN HADRONIZATION WITH ALICE AT THE LHC
Serpil YALÇIN KUZU

16:00 – 16:15 QUANTUM OPTIMIZATION OF AIRPLANE ROUTES USING TRAVELING SALESMAN PROBLEM
Sabri GÜNDÜZ

16:15 – 16:30 GROVER'S SEARCH ALGORITHM IMPLEMENTATION IN CONTINUOUS VARIABLES SYSTEMS
Güven AKPINAR

16:30 – 16:45 EXOTIC NEUTRAL CURRENT INTERACTIONS VIA COHERENT ELASTIC NEUTRINO NUCLEUS SCATTERING
Muhammad Fauzi MUSTAMIN

16:45 – 17:00 NON-STANDARD NEUTRINO INTERACTIONS VIA COHERENT ELASTIC NEUTRINO NUCLEUS SCATTERING
Muhammad Fauzi MUSTAMIN

17:00 – 17:15 SEARCH FOR LEPTON FLAVOR VIOLATION IN DECAYS OF THE Z BOSON WITH THE CMS DETECTOR
Wael HAJAHMAD

17:15 – 17:30 MISSING MEMBER OF THE $J^{\text{PC}} = 2^{--}$ NONET IN EXTREME CONDITIONS
Elif SERTBAKAN

TPS - 36

Turkish Physical Society
September 1 - 5, 2020

36th International Physics Congress
Istanbul - Kadir Has University

4 SEPTEMBER 2020, FRIDAY

HALL - 5

HIGH ENERGY, PARTICLE AND PLASMA PHYSICS

Zoom informations for Hall 5

Zoom Meeting ID: 867 6294 2184

Zoom Meeting Passcode: 683839

15:30 – 17:30 **CHAIR: Serkant Ali ÇETİN**

15:30 – 15:45 OPTIMIZATION AND DESIGN OF CUTTING-EDGE-TECHNOLOGY TOOLS FOR NATURAL SCIENCES RESEARCH IN THE 21ST CENTURY: X-RAY FREE ELECTRON LASERS
Bora KETENOĞLU

15:45 – 16:00 MAGNET ENGINEERING STUDIES ON BOOSTER RING OF TAC-TURKEY SYNCHROTRON RADIATION FACILITY
Ender AKDOĞAN

16:00 – 16:15 THEORETICALLY CALCULATION OF NUCLEON DENSITIES OF SOME ISOBAR NUCLEI OF 56 MASS NUMBER
İlkay TÜRK ÇAKIR

16:15 – 16:30 INVESTIGATION OF CROSS SECTIONS AND ASTROPHYSICAL S-FACTOR VALUES FOR $7\text{Be}(p,\text{g})8\text{B}$ REACTION IN THE LOW ENERGY RANGE
İlkay TÜRK ÇAKIR

16:30 – 16:45 PILOT TONE BPM SYSTEM DESIGN: WITH HIGH LEVEL FPGA PROGRAMMING METHOD
Ayhan AYDIN

16:45 – 17:00 GENETIC ALGORITHM-BASED OPTIMIZATION APPROACHES ON RADIATION CHARACTERISTICS OF AN X-RAY FREE-ELECTRON LASER
Ayhan AYDIN

17:00 – 17:15 PROBING THE ANOMALOUS QUARTIC $W\gamma\gamma$ COUPLINGS AT THE FCC-he
Volkan ARI

17:15 – 17:30 ENERGY-MOMENTUM TENSOR FORM FACTORS OF HYPERONS IN LIGHT-CONE QCD
Ulaş ÖZDEM



36th International Physics Congress
Istanbul - Kadir Has University

HALL 1
MATERIAL SCIENCE AND APPLICATIONS

TPS - 36

Turkish Physical Society
September 1 - 5, 2020

36th International Physics Congress
Istanbul - Kadir Has University

5 SEPTEMBER 2020, SATURDAY

HALL - 1

MATERIAL SCIENCE AND APPLICATIONS

Zoom informations for Hall 1

Zoom Meeting ID: 816 4876 7134

Zoom Meeting Passcode: 789777

11:00 – 13:30 CHAIR: TPS-36 ORGANIZING COMMITTEE:

11:00 – 11:15 GRAPHENOXIDE/GOLD NANOPARTICLE BASED ELECTROCHEMICAL SENSOR DESIGN FOR PESTICIDE RESIDUE ANALYSIS
Nazife ASLAN

11:15 – 11:30 TRANSITION METAL ADSORPTION ON GRAPHENE: DETERMINATION OF GAS SENSING PROPERTIES BY PLASMONIC EXCITATIONS
Çağrı KADEROĞLU

11:30 – 11:45 SUPERCAPACITOR PROPERTIES OF RGO-WO₃ ELECTRODES PREPARED BY ELECTRODEPOSITION TECHNIQUE
Yunus Emre FIRAT

11:45 – 12:00 CONSTRUCTION OF SPHERICALLY BENT ANALYZERS FOR NON-RESONANT INELASTIC X-RAY SCATTERING SPECTROMETER THROUGH ANODIC BONDING
Didem KETENOĞLU

12:00 – 12:15 EFFECTS OF THE PLATINUM DOPING CONCENTRATION ON THE OXYGEN GAS SENSITIVITY OF Pt/TiO₂/Pt DEVICES
Şenol KAYA

12:15 – 12:30 AN IMPROVED METHOD FOR DETERMINATION OF REFRACTIVE INDEX OF DIELECTRIC FILMS BY USING THE GENERALIZED MORSE WAVELET
Erhan TİRYAKİ

12:30 – 12:45 DETERMINATION OF SURFACE PROFILE OF RED BLOOD CELL BY USING THE GENERALIZED S-TRANSFORM
Erhan TİRYAKİ

12:45 – 13:00 THE EFFECT OF NANOSCALE Al DOPING ON MICROSTRUCTURAL AND SUPERCONDUCTING PROPERTIES OF MgB₂ SAMPLES
Hasan DURMUŞ

13:00 – 13:15 ROLE OF Ni DOPING ON THE ELECTRICAL, MAGNETIC AND SURFACE PROPERTIES OF ULTRASONIC SPRAYED ZnS THIN FILMS
Esra KUŞ

13:15 – 13:30 STRUCTURAL AND OPTICAL PROPERTIES OF SPRAY PYROLYSED ZnS:Mn THIN FILMS
Esra KUŞ



TPS - 36

Turkish Physical Society
September 1 - 5, 2020

36th International Physics Congress
Istanbul - Kadir Has University

HALL 6
MATHEMATICAL PHYSICS, ASTROPHYSICS
AND APPLICATIONS

TPS - 36

Turkish Physical Society
September 1 - 5, 2020

36th International Physics Congress
Istanbul - Kadir Has University

2 SEPTEMBER 2020, WEDNESDAY

HALL - 6

MATHEMATICAL PHYSICS, ASTROPHYSICS AND APPLICATIONS

Zoom informations for Hall 6

Zoom Meeting ID: 817 0748 9382

Zoom Meeting Passcode: 948949

15:30 – 17:45 **CHAIR: Değer SOFUOĞLU**

15:30 – 15:45 PHOTOMETRIC INVESTIGATION, PERIOD ANALYSIS AND EVOLUTIONARY STATUS OF THE SHORT-PERIOD ECLIPSING BINARY FV CV_n
Burcu ÖZKARDEŞ

15:45 – 16:00 IMAGE CLASSIFICATION ALGORITHM FOR DETERMINING THE LIGHT CURVE MORPHOLOGIES OF ASAS-SN ECLIPSING BINARIES
Burak ULAŞ

16:00 – 16:15 POSSIBLE EFFECTS OF SPACE RADIATION ON SPACE PEOPLE AND SPACECRAFT AND SOLUTION SUGGESTIONS
Mukadder İÇDİ ŞEN

16:15 – 16:30 A NETWORK MODEL FOR INTELLIGENCE
Emir HALIKI

16:30 – 16:45 A NEW GENERALIZATION OF DIFFERENTIAL TRANSFORM METHOD FOR SOLVING TRANSMISSION PROBLEMS
Merve YÜCEL

16:45 – 17:00 INVESTIGATION OF THE EVOLUTIONARY STATUS OF CONTACT BINARY STAR V1363 ORI
Fahri ALİÇAVUŞ

17:00 – 17:15 DETAILED ANALYSIS OF TWO ECCENTRIC BINARY STARS OBSERVED BY TESS
Fahri ALİÇAVUŞ

17:15 – 17:30 ANALYSIS OF SOME TESS FIELD PULSATING CHEMICALLY PECULIAR STARS
Filiz KAHRAMAN ALİÇAVUŞ

17:30 – 17:45 ANALYSIS OF TESS OBSERVATIONS OF ALGOL TYPE BINARY STAR GI Cep AND V746 Cep
Murat İnanç GÖZÜTOK

TPS - 36

Turkish Physical Society
September 1 - 5, 2020

36th International Physics Congress
Istanbul - Kadir Has University

3 SEPTEMBER 2020, THURSDAY
HALL - 6

MATHEMATICAL PHYSICS, ASTROPHYSICS AND APPLICATIONS

Zoom informations for Hall 6

Zoom Meeting ID: 817 0748 9382

Zoom Meeting Passcode: 948949

15:30 – 17:45 **CHAIR: Ertan GÜDEKLİ**

15:30 – 15:45 DYNAMICAL SYSTEM ANALYSIS OF FLRW MODELS WITH PERFECT FLUID
Ali Osman YILMAZ

15:45 – 16:00 AN ECONOPHYSICS APPLICATION TO THE PORTFOLIO OPTIMIZATION FOR BIST100
Merve KOCAMAN

16:00 – 16:15 PURCHASING POWER PARITY, INFLATION RATE, AND EXCHANGE RATE FORECASTING FOR TURKEY IN 2021
Merve KOCAMAN

16:15 – 16:30 LIKELIHOOD FREE PARTICLE FILTERING WITH APPROXIMATE BAYESIAN COMPUTATION FOR PARAMETER ESTIMATION IN COSMIC RAY AIR SHOWER STUDIES
Mustafa Kutay YABAŞ

16:30 – 16:45 EVOLUTION AND CONSTRAINT EQUATIONS IN F(G) COSMOLOGY
Nurşah AKTAY

16:45 – 17:00 GENERALIZED GÖDEL UNIVERSE IN $\kappa(R,T)$ GRAVITY
Emir BAYSAZAN

17:00 – 17:15 DYNAMICAL SYSTEM ANALYSIS OF ANISOTROPIC AND HOMOGENOUS $f(R)$ GRAVITY MODELS
Enes Talha KIRCA

17:15–17:30 DYNAMIC SYSTEM ANALYSIS IN HOMOGENEOUS AND ISOTROPIC $f(R)$ GRAVITY MODELS
Hande AYGENLİ

17:30 – 17:45 HOMOGENEOUS AND ANISOTROPIC UNIVERSE MODELS IN $f(R,T)$ GRAVITY
Batuhan ÇİL

TPS - 36

Turkish Physical Society
September 1 - 5, 2020

36th International Physics Congress
Istanbul - Kadir Has University

4 SEPTEMBER 2020, FRIDAY

HALL - 6

MATHEMATICAL PHYSICS, ASTROPHYSICS AND APPLICATIONS

Zoom informations for Hall 6

Zoom Meeting ID: 817 0748 9382

Zoom Meeting Passcode: 948949

15:30 – 17:30 **CHAIR: Fatma Çağla AKINCI**

15:30 – 15:45 BESSEL FUNCTIONS REVISITED
Telhat ÖZDOĞAN

15:45 – 16:00 THE FIRST SPECTROSCOPIC SOLUTIONS OF TWO SOUTHERN ECLIPSING BINARY STARS: VW Ret AND FW Vel
Derya SÜRGİT

16:00 – 16:15 VISSER-KAR-DADHICH WORMHOLE IN $f(R,T)$ GRAVITY
Doğukan TAŞER

16:15 – 16:30 STOCHASTIC POPULATION MODEL WITH PREDATION FEAR
Çağatay ESKİN

16:30 – 16:45 BI-HAMILTONIAN STRUCTURE OF (2+1)-DIMENSIONAL EVOLUTIONARY HIROTA TYPE EQUATIONS
Damla KOCAMAN

16:45 – 17:00 A THIRD BODY WITH EARTH MASS IN ECLIPSING BINARY SYSTEM KIC 8610483
Çağlayan NEHİR

17:00 – 17:15 ORBITAL PERIOD CHANGES OF SEMI-DETACHED SYSTEMS: KIC 4574310 AND KIC 9159301
Çağlayan NEHİR

17:15 – 17:30 INVESTIGATION OF MAGNETIZED STRANGE QUARK MATTER DISTRIBUTION IN $f(R,T)$ THEORY
Sinem KALKAN

TPS - 36

Turkish Physical Society
September 1 - 5, 2020

36th International Physics Congress
Istanbul - Kadir Has University

5 SEPTEMBER 2020, SATURDAY

HALL - 2

MATHEMATICAL PHYSICS, ASTROPHYSICS AND APPLICATIONS

Zoom informations for Hall 2

Zoom Meeting ID: 828 1395 4794

Zoom Meeting Passcode: 535264

- 15:30 – 17:15 **CHAIR: Değer SOFUOĞLU**
- 15:30 – 15:45 MASS LOSS ESTIMATES FOR SEMI-DETACHED BINARIES AF Gem AND RY Gem
Muhammed Faruk YILDIRIM
- 15:45 – 16:00 ORBITAL PERIOD BEHAVIOR OF THREE SEMI-DETACHED BINARIES: AI Cru, V1898
Cyg AND Z Vul
Muhammed Faruk YILDIRIM
- 16:00 – 16:15 ASPECTS OF AHARONOV-CASHER AND AHARONOV-BOHM EFFECTS IN
ENTANGLED SYSTEMS
Melik Emirhan TUNALIOĞLU
- 16:15 – 16:30 FREE ELECTRON DENSITY IN THE GALAXY, DISTANCES OF NEUTRON STARS
Pınar KÜTÜKÇÜ
- 16:30 – 16:45 INVESTIGATION OF THE DOMAIN WALL MATTER DISTRIBUTIONS IN F(R,T)
THEORY WITH Λ
Nevruz TAŞ
- 16:45 – 17:00 TUNNELING AS FERMIONIC EMISSION OF BLACK STRINGS
Maryam JAMADI
- 17:00 – 17:15 FERMION EMISSION OF GLOBAL AND LOCAL MONOPOLE BLACK HOLES
Maryam JAMADI



36th International Physics Congress
Istanbul - Kadir Has University

HALL – 7
MEDICAL PHYSICS AND APPLICATIONS

TPS - 36

Turkish Physical Society
September 1 - 5, 2020



36th International Physics Congress
Istanbul - Kadir Has University

2 SEPTEMBER 2020, WEDNESDAY

HALL - 7

MEDICAL PHYSICS AND APPLICATIONS

Zoom informations for Hall 7

Zoom Meeting ID: 883 4069 3699

Zoom Meeting Passcode: 798795

- 15:30 – 17:15 CHAIR: TPS-36 ORGANIZING COMMITTEE:**
- 15:30 – 15:45 THE ROLE OF POTASSIUM IONS IN NEUROLOGICAL DISEASES**
Enes AKYÜZ
- 15:45 – 16:00 INVESTIGATION OF THE INFLUENCE OF VOXEL-SIZE EFFECTS ON THE PATIENT DOSE DISTRIBUTIONS FOR MONTE CARLO DOSE CALCULATIONS IN 192Ir INTERSTITIAL BREAST BRACHYTHERAPY**
Sibel SARIAYDIN
- 16:00 – 16:15 DETERMINATION OF RADIATION EXPOSURE AMONG STUDENTS DURING THEIR INTERNSHIPS**
Handan TANYILDIZI KÖKKÜLÜNK
- 16:15 – 16:30 EVALUATION OF VIRUS AND RADIATION RELATION IN TERMS OF STERILIZATION**
Handan TANYILDIZI KÖKKÜLÜNK
- 16:30 – 16:45 EXAMINATION OF ZINC AND MELITTIN APPLICATIONS ON A549 LUNG CANCER CELLS BY USING RAMAN SPECTROSCOPY**
Duygu TARHAN
- 16:45 – 17:00 PERFORMANCE COMPARISON OF GAMMA CAMERAS OF SEMICONDUCTOR CdZnTe AND SCINTILATOR NaI(Tl) DETECTORS**
ARMAĞAN AYDIN

TPS - 36

Turkish Physical Society
September 1 - 5, 2020

36th International Physics Congress
Istanbul - Kadir Has University

5 SEPTEMBER 2020, SATURDAY

HALL – 3

MEDICAL PHYSICS AND APPLICATIONS

Zoom informations for Hall 3

Zoom Meeting ID: 875 5118 1095

Zoom Meeting Passcode: 327855

- 15:30 – 17:30 CHAIR: TPS-36 ORGANIZING COMMITTEE:**
- 15:30 – 15:45** EFFECTS OF SMOKING ON SERUM NICKEL AND BORON LEVELS
Denizhan KARIŞ
- 15:45 – 16:00** THE EFFECT OF DIFFERENT CT NUMBER-RELATIVE ELECTRON DENSITY TABLES ON TWO DIFFERENT DOSE CALCULATION ALGORITHMS
Aysun İNAL
- 16:00 – 16:15** DETERMINING DOSE CALCULATION DIFFERENCES BETWEEN MC, CCC AND PB ALGORITHMS FOR VARIOUS HETEROGENEITIES IN RADIOTHERAPY USING CATPHAN 600 PHANTOM
Yelda ELÇİM
- 16:15 – 16:30** THERMODYNAMIC EFFECTS OF HEXADECYLPHOSPHOCHOLINE, A CANCER AGENT, ON ZWITTERIONIC AND ANIONIC MODEL MEMBRANES
Züleyha ÖZÇELİK ÇETİNEL
- 16:30 – 16:45** DOSIMETRIC COMPARISON OF TWO DIFFERENT RADIOTHERAPY TECHNIQUES IN BREAST CANCER
Gökçen İNAN
- 16:45 – 17:00** DOSIMETRIC EVALUATION OF MANUAL AND INVERSE OPTIMIZATION TREATMENT PLANNING FOR HIGH DOSE RATE BRACHYTHERAPY OF ENDOMETRIUM CANCER
Gökçen İNAN
- 17:00 – 17:15** DOSIMETRIC COMPARISON OF THREE-DIMENSIONAL CONFORMAL RADIOTHERAPY AND INTENSITY-MODULATED RADIOTHERAPY FOR DEEP LOCATION TUMOUR
Osman Vefa GÜL
- 17:15 – 17:30** DOSIMETRIC COMPARISON OF GEOMETRIC AND INVERSE OPTIMIZATION TREATMENT PLANNING FOR HIGH DOSE RATE BRACHYTHERAPY OF CERVICAL CANCER
Osman Vefa GÜL



TPS - 36

Turkish Physical Society
September 1 - 5, 2020

36th International Physics Congress
Istanbul - Kadir Has University

HALL 7
NUCLEAR PHYSICS

TPS - 36

Turkish Physical Society
September 1 - 5, 2020

36th International Physics Congress
Istanbul - Kadir Has University

3 SEPTEMBER 2020, THURSDAY

HALL 7

NUCLEAR PHYSICS

Zoom informations for Hall 7

Zoom Meeting ID: 883 4069 3699

Zoom Meeting Passcode: 798795

15:30 – 17:30 **CHAIR: Lidya AMON SUSAM**

15:30 – 15:45 THEORETICALLY CALCULATION OF NUCLEON DENSITIES AND NUCLEAR POTENTIALS IN SOME ISOTONE NUCLEI OF 28 NEUTRONS
İsmail Hakkı SARPÜN

15:45 – 16:00 EVALUATION OF CROSS SECTIONS, REACTION RATES AND ASTROPHYSICAL S-FACTORS FOR (0-4) MEV ENERGY RANGE FOR SELENIUM ISOTOPES
İsmail Hakkı SARPÜN

16:00 – 16:15 COUPLED-CHANNEL ANALYSES ON $^{32}\text{S}+^{90}\text{Zr}$ AND $^{32}\text{S}+^{96}\text{Zr}$ HEAVY-ION FUSION REACTIONS AND BARRIER DISTRIBUTIONS
Burcu EROL

16:15 – 16:30 THE GAMMA RAY SORPTION OF PS-PEG-OPC COMPOSITES AND PS-PEG-OPC-BN NANOCOMPOSITES
Burcu EROL

16:30 – 16:45 RADON AND RADIUM MEASUREMENTS OF ESKİŞEHİR SPA WATERS
Mustafa BİÇER

16:45 – 17:00 RADON MEASUREMENTS OF THE SPRING WATERS IN SAKARYA, TURKEY
Osman KAPTAN

17:00 – 17:15 CHARMED NUCLEI WITH MEAN FIELD APPROACH
Haşim Zahid GÜVEN

17:15 – 17:30 INVESTIGATION OF RADON EXHALATION RATES IN HEAVY CONCRETE WITH LR 115-TYPE II DETECTOR USING SEALED CAN TECHNIQUE
Duygu ERDEK

TPS - 36

Turkish Physical Society
September 1 - 5, 2020

36th International Physics Congress
Istanbul - Kadir Has University

4 SEPTEMBER 2020, FRIDAY

HALL 7

NUCLEAR PHYSICS

Zoom informations for Hall 7

Zoom Meeting ID: 883 4069 3699

Zoom Meeting Passcode: 798795

15:30 – 17:15 **CHAIR: Ayşegül ERTOPRAK**

15:30 – 15:45 THE USAGE OF ROOT IN ANALYZING GAMMA-RAYS WITH COVELL AND TOTAL PEAK AREA METHODS
İlker Can ÇELİK

15:45 – 16:00 A NOVEL METHOD OF ANALYZING A REACTION USING THE DATA FROM PARTICLE AND GAMMA-RAY DETECTORS
İlker Can ÇELİK

16:00 – 16:15 CALCULATIONS OF NUCLEAR LEVEL DENSITIES FOR SOME DEFORMED NUCLEI
Taylan BAŞKAN

16:15 – 16:30 NUCLEAR APPLICATIONS PROPOSAL AT TARLA FACILITY
Hatice YILMAZ ALAN

16:30 – 16:45 INSPECTING OF ^{211}At RADIONUCLIDE VIA FUSION REACTION OF STABLE ^{19}F AND ^{192}Os NUCLEI
Zehra Merve CİNAN

16:45 – 17:00 PS-PEG BLOCK COPOLYMERS AND PS-PEG-BN NANOCOMPOSITES-GAMMA RAY INTERACTION
Zehra Merve CİNAN

17:00 – 17:15 INVESTIGATION OF SEASONAL RADON LEVELS WITH AN ELECTRONIC DETECTOR
Abbas Alpaslan KOÇER

TPS - 36

Turkish Physical Society
September 1 - 5, 2020

36th International Physics Congress
Istanbul - Kadir Has University

5 SEPTEMBER 2020, SATURDAY

HALL 4

NUCLEAR PHYSICS

Zoom informations for Hall 7

Zoom Meeting ID: 883 4069 3699

Zoom Meeting Passcode: 798795

15:30 – 17:15 **CHAIR: Ayşegül ERTOPRAK**

15:30 – 15:45 MICROSCOPIC INVESTIGATION OF LOW- AND HIGH- LYING ELECTRIC DIPOLE RESONANCE IN ODD-MASS 153EU
Huseynqulu QULIYEV

15:45 – 16:00 STRUCTURE OF PYGMY DIPOLE RESONANCE IN WELL DEFORMED 146,148,150,152Nd
Huseynqulu QULIYEV

16:00 – 16:15 ELECTRIC DIPOLE EXCITATIONS IN 233U WITHIN TGI-QPNM
Elif KEMAH

16:15 – 16:30 MAGNETIC DIPOLE MOMENTS OF $K=1/2$ STATES IN ODD-MASS Yb ISOTOPES
Elif KEMAH

16:30 – 16:45 PRELIMINARY RESULTS OF RADIATION ABSORPTION PROPERTIES OF LIGNOCELLULOSE ADDED CONCRETES
Hacı Ali GÜRDAL

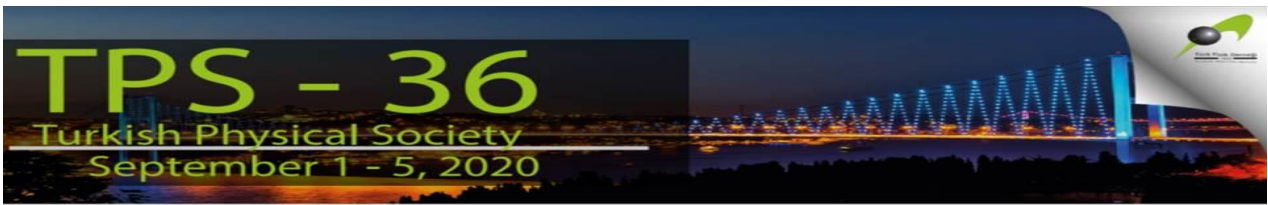
16:45 – 17:00 NORM RADIATION LEVELS IN SURFACE SOIL SAMPLES FROM DWELLING AREAS OF NORTH CYPRUS
Devan Jessie Aaron RUDOLPH

17:00 – 17:15 HEAVY METALS CONCENTRATION IN SURFACE SOIL SAMPLES FROM DWELLING AREAS OF NORTH CYPRUS
Devan Jessie Aaron RUDOLPH



36th International Physics Congress
Istanbul - Kadir Has University

HALL 1
PHYSICS EDUCATION AND APPLICATIONS



36th International Physics Congress
Istanbul - Kadir Has University

5 SEPTEMBER 2020, SATURDAY

HALL 1

PHYSICS EDUCATION AND APPLICATIONS

Zoom informations for Hall 1

Zoom Meeting ID: 816 4876 7134

Zoom Meeting Passcode: 789777

13:30 – 14:15 CHAIR: TPS-36 ORGANIZING COMMITTEE:

13:30 – 13:45 ASSESSMENT AND EVALUATION METHODS PROVIDED BY PRACTITIONERS IN APPLICATIONS OF DISTANCE PHYSICAL EDUCATION IN THE COVID-19 PROCESS
Ahmet KUMAŞ

13:45 – 14:00 COMPARATIVE EVALUATION OF DISTANCE PHYSICS EDUCATION APPLICATIONS APPLIED IN THE COVID-19 PROCESS
Ahmet KUMAŞ

14:00 – 14:15 COMPLEXITY AND DERRIDA
Vahap SAMANLI