

TIM 2012 SESSION MATRIX

| | Aula Magna | F205 | F206 | F203 |
|---------------------------|---|---|---|---|
| 28th of November | | | | |
| 9:30 am -11:00 am | Plenary Session 1 Chair(s): Daniel Vizman | | | |
| 11:00 am -11:30 am | Coffee Break (outside Aula Magna) | | | |
| 11:30 am -1:00 pm | Plenary Session 2 Chair(s): Goran Djordjevic | | | |
| 1:00 pm - 2:30 pm | Lunch (Faculty of Physics 1st Floor) | | | |
| 2:30 pm - 4:15 pm | | API Session 1 Chair(s): Agneta Balint & Martin Bellman | CMP Session 1 Chair(s): Pascu Moca & Felicia Iacomi | TCP Session 1 Chair(s): Constantin Bizdadea |
| 4:15 pm - 4:45 pm | Coffee Break (Faculty of Physics Hallway) | | | |
| 4:45 pm - 6:30 pm | | API Session 2 Chair(s): Nicoleta Stefu & Daniel Ursescu | CMP Session 2 Chair(s): Nicolae Avram & Oana Raita | TCP Session 2 Chair(s): Goran Djordjevic |
| 6:30 pm - 8:00 pm | API Poster Session (outside Aula Magna) | | | |
| 29th of November | | | | |
| 8:30 am -10:30 am | Plenary Session 2 Chair(s): Virgil Baran & Mihai Girtu | | | |
| 10:30 am -12:00 am | CMP and TCP Poster Session (outside Aula Magna) | | | |
| 12:00 pm - 1:45 pm | | API Session 3 Chair(s): Laszlo Nanai & Stefan Balint | CMP Session 3 Chair(s): Paul Fannin & Sebastian Popescu | TCP Session 3 Chair(s): Adrian Neagu |
| 1:45 pm - 3:15 pm | Lunch (Faculty of Physics 1st Floor) | | | |
| 3:15 pm - 4:45 pm | HPC Workshop (VENUE TO BE ANNOUNCED) Chair(s): Claudiu Biris | Education in Physics - Oral and Poster Session Chair(s): Ovidiu Caltun & Mihai Lungu | CET Workshop Chair(s): Corneliu Craciunescu | TCP Session 4 Chair(s): Aurelian Isar |

Conference Schedule

Conference Venues:

- **Aula Magna** - the grand amphitheatre of the University, located on the 1st floor of the entry hallway
- **F205** - the Council Hall, located on the 2nd Floor of the Faculty of Physics
- **F206** - the Faculty of Physics amphitheatre, located on the 2nd Floor
- **F203** - the Seminar Hall, located on the 2nd Floor of the Faculty of Physics

27th November 2012

6:00 pm

Evening Registration - *Faculty of Physics Hallway, 2nd Floor*

8:00 pm

Cocktail Reception - *Faculty of Physics Hallway, 2nd Floor*

28th November 2012

8:30 am

Morning Registration - *Outside Aula Magna*

9:30 am

NONLINEAR PROCESSES IN LOW TEMPERATURE PLASMAS RELATED TO THE EMERGENCE OF ORDERED STRUCTURES - *Aula Magna*

10:00 am

DYE-SENSITIZED SOLAR CELLS - A COMBINED COMPUTATIONAL AND EXPERIMENTAL APPROACH - *Aula Magna*

10:30 am

NUMERICAL SIMULATION OF CRYSTALLIZATION PROCESSES FOR THE PRODUCTION OF SILICON FOR PHOTOVOLTAIC APPLICATIONS - *Aula Magna*

11:00 am

Coffee Break - *Outside Aula Magna*

11:30 am

STATUS OF THE ELI-NP FACILITY - *Aula Magna*

12:00 pm

SPIN DYNAMICS AND FERROMAGNETIC PHASE INVESTIGATED BY MAGNETIC RESONANCE IN MICRO AND NANO POWDERS OF DILUTED MAGNETIC SEMICONDUCTORS - *Aula Magna*

12:30 pm

NUCLEAR AND SUBNUCLEAR COLLECTIVE DYNAMICS WITHIN MICROSCOPIC TRANSPORT MODELS - *Aula Magna*

1:00 pm

Lunch - *Faculty of Physics, 1st Floor*

2:30 pm

STOCHASTIC MODELING OF SUNSHINE NUMBER DATA [invited] - *F205*

SU(3) ANDERSON IMPURITY MODEL: A NUMERICAL RENORMALIZATION GROUP APPROACH EXPLOITING NON-ABELIAN SYMMETRIES [invited] - *F206*

HIDDEN SYMMETRIES OF HIGHER DIMENSIONAL KERR-NUT-(A)DS SPACES [invited] - *F203*

3:00 pm

COMPUTATION OF GLOBAL SOLAR IRRADIANCE IN ROMANIA BY USING WRF. PRELIMINARY RESULTS - *F205*

INFLUENCE OF THE STIRRER POSITION ON THE MELT CONVECTION IN THE DIRECTIONAL SOLIDIFICATION PROCESS OF MULTICRYSTALLINE SILICON - *F206*

NON-LOCAL INFLATION AND TACHYONS [invited] - *F203*

3:15 pm

COMPARATIVE STUDY OF THz GENERATION AND DETECTION IN ZnTe CRYSTALS AND PHOTOCONDUCTIVE ANTENNAS - *F205*

FARADAY WAVES IN BINARY NONMISCIBLE BOSE-EINSTEIN CONDENSATES - *F206*

3:30 pm

UPCONVERSION LUMINESCENCE OF NANOLANGASITE DOPED WITH Er³⁺ AND Yb³⁺ - *F205*

STRUCTURAL AND ELECTRONIC CHARACTERISTICS OF Fe/AgCl(AgBr) (001) INTERFACES AND SPIN DEPENDENT TRANSPORT PROPERTIES OF Fe/AgCl(AgBr)/Fe (001) MAGNETIC TUNNEL JUNCTIONS - *F206*

BLACK HOLES ON THE TAUB-BOLT INSTANTON IN 5 DIMENSIONS - *F203*

3:45 pm

MELT STIRRING BASED ON A COMBINATION OF ELECTRICAL CURRENT AND MAGNETIC FIELD - *F205*

COMPARATIVE ANALYSIS OF GRAPHENE AND SPIROGRAPHENE QUANTUM DOTS - *F206*

BLACK HOLES ON A KALUZA-KLEIN BUBBLE - *F203*

4:00 pm

IMPURITY DISTRIBUTION STUDY IN MULTI-CRYSTALLINE SILICON GROWN BY BRIDGMAN METHOD - *F205*

GEOMETRIC ALGEBRA, QUANTIZATION AND STRING COMPACTIFICATIONS - *F203*

4:15 pm

Coffee Break - *Faculty of Physics Hallway, 2nd Floor*

4:45 pm

SHIELDING OF PRE-FOCAL ACOUSTIC OBSTACLES IN MR-GUIDED FOCUSED ULTRASOUND THERAPY: NUMERICAL SIMULATIONS AND IN VIVO DEMONSTRATION -*F205*

EFFECT OF CO CONTENT AND UV IRRADIATION ON THE STRUCTURE AND PROPERTIES OF ZNO THIN FILMS [invited] - *F206*

QUANTUM AND CLASSICAL CORRELATIONS OF TWO-MODE GAUSSIAN SYSTEMS IN A THERMAL ENVIRONMENT [invited] - *F203*

5:15 pm

STUDY OF AN SL21 PEPTIDE STRUCTURE AND ITS INTERACTION WITH CALMODULIN -*F205*

ELECTRONIC PROPERTIES OF QUASI ONE-DIMENSIONAL QUANTUM WIRE MODELS UNDER EQUAL COUPLING STRENGTH SUPERPOSITIONS OF RASHBA AND DRESSELHAUS SPIN-ORBIT INTERACTIONS IN THE PRESENCE OF AN IN-PLANE MAGNETIC FIELD. SPIN PRECESSION EFFECTS - *F206*

CONSISTENT INTERACTION VERTICES IN ARBITRARY TOPOLOGICAL BF THEORIES [invited] - *F203*

5:30 pm

DEVELOPMENT AND EVALUATION OF LAYER BY LAYER IMMOBILIZED ENZYME-BASED BIOSENSOR USING ELECTROCHEMISTRY AND SPR SPECTROSCOPY - *F205*

MODEL BASED COMPUTATION OF THE IMPURITY DISTRIBUTION IN A SHEET GROWN FROM THE MELT BY THE EDGE-DEFINED FILM-FED GROWTH TECHNIQUE - *F206*

5:45 pm

MAGNETIC NANOPARTICLES FOR BIOMEDICAL APPLICATIONS. PROGRESS AND CHALLENGES - *F205*

NANOSIZED CORE/SHELL SYSTEMS WITH MAGNETIC PROPERTIES FOR VARIOUS APPLICATIONS - *F206*

STATISTICAL APPROACH OF MODULATION INSTABILITY BEYOND GAUSSIAN APPROXIMATION - *F203*

6:00 pm

EFFECT OF GAMMA IRRADIATION ON NANOMECHANICAL PROPERTIES OF ENAMEL AND DENTINE - *F205*

SPONTANEOUS SYNCHRONIZATION OF METRONOMES ON A FREELY ROTATING PLATFORM - *F203*

6:15 pm

THE EFFECT OF COOLING ON SAUSAGE AND KINK OSCILLATION MODES IN EXPANDING CORONAL LOOPS - *F205*

NEUTRINO MASSES IN $SU(4) \times U(1)$ GAUGE MODELS - *F203*

6:30 pm

API Poster Session - *Outside Aula Magna*

8:00 pm

Formal Dinner - *Faculty of Physics, 1st Floor*

29th November 2012

8:30 am

STIMULATED OXIDATION OF METALS (LASER, ELECTRIC FIELD, ...): THE COMPARATIVE STUDIES - *Aula Magna*

9:00 am

EXCESS OF ELECTRICAL CONDUCTIVITY FLUCTUATION ON BULK BI-2223 AND BI-2212 THIN FILMS SUPERCONDUCTORS - *Aula Magna*

9:30 am

PRESSURE EFFECTS ON CRYSTAL STRUCTURES AND MAGNETIC PROPERTIES OF RARE-EARTH (YTTRIUM)-COBALT COMPOUNDS - *F206*

10:00 am

PHOTOLUMINESCENCE INVESTIGATIONS OF NANOMATERIALS - *Aula Magna*

10:30 am

CMP and TCP Poster Session - *Outside Aula Magna*

12:00 pm

LASER-INDUCED PLASMA: FUNDAMENTALS AND APPLICATIONS - *F205*

INVESTIGATION OF TEXTURAL EFFECTS IN FERROFLUID BASED SILICONE ELASTOMER MICROSTRUCTURE BY MEANS OF SANS [invited] - *F206*

LATTICE BOLTZMANN SIMULATIONS OF BIOLOGICAL TISSUE FUSION - *F203*

12:15 pm

A KINETIC MONTE CARLO STUDY FOR STRIPE-LIKE MAGNETIC DOMAINS IN FERRIMAGNETIC THIN FILMS - *F203*

12:30 pm

FRACTAL ANALYSIS OF LASER IRRADIATED VANADIUM SURFACES MORPHOLOGY UNDER DIFFERENT AMBIENTS - *F205*

ON THE USE OF POLARISED FERROMAGNETIC RESONANCE MEASUREMENTS IN THE DETERMINATION OF THE DYNAMIC PROPERTIES OF MAGNETIC FLUIDS - *F206*

THE NUMERICAL SOLUTION OF THE TIME-DEPENDENT SCHRODINGER EQUATION FOR ATOMS IN INTENSE LASER FIELD - *F203*

12:45 pm

MONITORING NANOPARTICLE AGGREGATION BY OPTICAL PROCEDURES - *F205*

SOME OPEN PROBLEMS IN PHYSICS OF DISORDERED MATERIALS - *F206*

ON N-SOLITON INTERACTIONS FOR A CLASS OF VECTOR NONLINEAR SCHRODINGER EQUATIONS - *F203*

1:00 pm

SPECTRAL INVESTIGATIONS OF TWO SIMULTANEOUS FIREBALLS IN PLASMA - *F205*

INVESTIGATIONS OF FERROFLUIDS MICROSTRUCTURE AT THE IBR-2 REACTOR - *F206*

ON CHANNEL MIXING EFFECTS IN DISSOCIATIVE RECOMBINATION: A SIMPLE MODEL FOR BASIC INSIGHT AND QUICK PREDICTIONS. APPLICATION TO H₂⁺ AND H₃⁺ - *F203*

1:15 pm

HYDROGEN DEPTH PROFILING OF TiC USING RESONANT NUCLEAR REACTIONS ANALYSIS - *F205*

STRUCTURE-PROPERTIES CORRELATIONS FOR THREE MANGANESE-PORPHYRIN QUASI-ONE-DIMENSIONAL MOLECULAR MAGNETS - *F203*

1:30 pm

THE MOISTURE INFLUENCE ON THE POROELASTIC PARAMETERS OF POROUS BUILDING MATERIAL - *F205*

1:45 pm

Lunch - Faculty of Physics, 1st Floor

3:15 pm

High Performance Computing **Workshop** - VENUE TO BE ANNOUNCED INTERACTIVE TEACHING METHODS APPLICABLE IN PHYSICS - *F205*

Combinatorial Exploration Tools **Workshop** - *F206*

GENERAL COMPACTIFICATIONS OF M-THEORY TO AdS3 PRESERVING N=2 SUSY - STUDY OF GEOMETRICAL SET-UP USING GEOMETRIC ALGEBRA AND IMPLICATIONS - *F203*

3:30 pm

PROBLEMS IN TEACHING PHYSICS AT TECHNICAL UNIVERSITIES - *F205*

N=2 FLUX COMPACTIFICATION OF M-THEORY TO AdS3 USING GEOMETRIC ALGEBRA TECHNIQUES - *F203*

3:45 pm

PATTERNS OF INITIAL AND CONTINUOUS TRAINING OF PHYSICS TEACHERS IN EUROPE - *F205*

SCALAR SPHERICAL ENERGY EIGENFUNCTIONS ON THE EXPANDING DE SITTERSPACETIME - *F203*

4:00 pm

EU FUNDED DOCTORAL STUDIES. POSDRU PROGRAMME - CONSTRAINTS AND OPPORTUNITIES [invited] - *F205*

FIRST-ORDER DYNAMICS FOR MASSLESS TENSOR GAUGE FIELDS OF DEGREE THREE - *F203*

4:15 pm

ON THE QUANTIZATION OF THE MASSIVE FORMS - *F203*

4:30 pm

EP Poster Session (to be held in parallel with oral session) - *F205*

SPINNING BLACK HOLES IN A GAUGE THEORY OF GRAVITATION - *F203*

5:30 pm

Celebration of Golden Jubilee of Faculty of Physics - *Aula Magna*

8:00 pm

Conference Banquet - "*Casa Politehnicii*" Restaurant

30th November 2012

11:00 am - 3:00 pm

Recas Winery Visit - *Recas Winery, Timis County*