**SELECTED Different seminars AND TALKS given during last three years:**

1. Multi-fluid hydrodynamics in charge density waves with collective, electronic, and solitonic densities and currents.
2. From Chiral Anomaly to two-fluid hydrodynamics for electronic Vortices.
3. NONSTATIONARY QUANTUM HALL EFFECT IN A MESA JUNCTION OF A CHARGE DENSITY WAVE CONDUCTOR.
4. Anomalous elementary particles and structures in interacting (quasi) one-dimensional many body systems: from exact solutions and beyond.
5. RECENT IDENTIFICATIONS OF MICROSCOPIC SOLITONS IN QUASI 1D ELECTRONIC SYSTEMS AND GENERALIZATIONS TO HIGHER DIMENSIONS.
6. PHASE TRANSITIONS OF CONFINEMENT AND OF STRIPES’ FORMATION IN ENSEMBLES OF SOLITONS INDUCED BY AN OPTICAL PUMPING OR ELECTROSTATIC DOPING.
7. Patterns formation and locally induced phase transformations in low dimensional electronic crystals.
8. Spacio-temporal patterns of A dynamical phase transformation TO THE EXCITONIC INSULATOR STATE WITH APPLICATIONS TO a femto-second pumping of excitons IN THE CHARGE-TRANSFER FERROELECTRIC STATE.
9. Electronic correlations and excitons in optically active polymers.
10. Phenomenological theory, MODELING OF FORMATION AND EVOLUTION OF DOMAIN WALLS GLOBULES AND NETWORKS IN APPLICATIONS TO switching by optical or voltage pulses in 1T-TaS2.
11. MODELING OF PHASE-SLIP PROCESSES IN CDWS.
12. Modeling of transient electronic vortices in nano-junctions of charge density waves.
13. EXTRACTING CRITICALITY AND DOMAINS’ MOTION FROM PERMITTIVITY OF THE ELECTRONIC FERROELECTRIC (TMTTF)2X.
14. Electronic Ferroelectricity.
15. Collective conductivity, criticality and reconstruction in systems with an infinite permittivity.

**Courses of lectures:**

WHEN THE INTUITION BETRAYS OR SAVES YOU: MESSAGES FROM THE 1D WORLD

New trends in physics of cooperative electronic states in low-dimensional systems.

Physics of synthetic conductors as low dimensional correlated electronic systems.

Local, nonlinear, non-stationary, and dynamical effects in low dimensional cooperative electronic states.