

Theoretical Condensed Matter Workshop in Honor of Prof. Tomak
Scientific Program

22 December 2005 (Thursday)

Chairman	R. Turan (METU)	<i>Speakers, please load your presentation files in advance</i>
09:20-09:30	S. Bilikmen (METU)	Opening
09:30-10:10	K. F. Berggren (Linköping)	Transport in ballistic semiconductor constriction and cross over to quasi-one-dimensionality
10:10-10:50	M. Erbudak (ETH)	Quasicrystals – a challenge for solid state physics
10:50-11:10	Tea Break	
Chairman	A. Aydınli (Bilkent)	<i>Speakers, please load your presentation files in advance</i>
11:10-11:50	Ş. Erkoç (METU)	Relativistic atomic calculations using DFT method: applications to resonance states
11:50-12:15	O. Gülseren (Bilkent)	Materials from first principles
12:15-12:40	M. Uludoğan (Texas A&M)	DFT study of ferroelectric materials
12:40-14:00	Lunch Break	
Chairman	C. Yalabık (Bilkent)	<i>Speakers, please load your presentation files in advance</i>
14:00-14:40	B. Tanatar (Bilkent)	Interplay between disorder and interaction effects in 2D electron systems
14:40-15:20	İ. H. Duru (IYTE)	Casimir energies in cavities of different shapes
15:20-15:40	Tea Break	
Chairman	H. Özkan (METU)	<i>Speakers, please load your presentation files in advance</i>
15:40-16:00	R. T. Senger (Bilkent)	Formation of large bipolarons in low-dimensional structures
16:00-16:20	M. Şahin (Selçuk) Ü. Atav (Selçuk) M. Tomak (METU)	Applications of genetic algorithm to quantum mechanical systems
16:20-16:40	B. Gülveren (Selçuk) Ü. Atav (Selçuk) M. Tomak (METU)	Two-dimensional parabolic quantum dot with N electrons

23 December 2005 (Friday)

Chairman	A. Erçelesi (Bilkent)	<i>Speakers, please load your presentation files in advance</i>
09:30-09:55	M. Taş (Bilkent)	Dielectric formalism of one-dimensional electron gas
09:55-10:20	C. Bulutay (Bilkent)	Electronic structure of silicon and germanium nanocrystals
10:20-10:45	M. Ö. Oktel (Bilkent)	Vortex lattices of Bose-Einstein condensates
10:45-11:10	Tea Break	
Chairman	H. Yurtseven (METU)	<i>Speakers, please load your presentation files in advance</i>
11:10-11:50	A. N. Berker (Koç, MIT)	Superconducting phases, superfluid weights, carrier densities and chemical potential shift in electronic lattice models
11:50-12:10	İ. Karabulut (Selçuk) H. Şafak (Selçuk) M. Tomak (METU)	Calculation of linear and nonlinear intersubband optical absorptions in an asymmetrical semiparabolic quantum wells
12:10-12:30	A. Biber (TÜBİTAK-MAM)	Time-Domain technique to study the ray movement inside bounded anisotropic medium
12:30-14:00	Lunch Break	
Chairman	N. Berker (Koç, MIT)	<i>Speakers, please load your presentation files in advance</i>
14:00-14:40	T. Çağın (Texas A&M)	Evolution of molecular dynamics methods for simulating condensed phases of matter
14:40-15:00	C. Beşikci (METU)	Monte Carlo modeling of QWIPs
15:00-15:20	İ. Koçoğlu (Trakya) S. Ş. Dalgıç (Trakya)	A MD study of the static structure, thermodynamic and transport properties of liquid iron using the EAM
15:20-15:40	Tea Break	
Chairman	Ş. Erkoç (METU)	<i>Speakers, please load your presentation files in advance</i>
15:40-16:00	S. Dalgıç (Trakya) M. Çolakoğulları (Trakya)	Self diffusion coefficients in liquid Ag using the EAM based effective pair potentials
16:00-16:20	H. H. Kart (Pamukkale) M. Tomak, T. Çağın	Molecular dynamics study of Cu-Au intermetallic alloys
16:20-16:40	S. Ö. Kart (Pamukkale) M. Tomak, M. Uludoğan T. Çağın	Molecular dynamics studies on glass formation of Pd-Ni by rapid quenching