# Schedule Summary With chairs and location

#### Monday 13 August

8:30 - 9:00 9:00 - 9:45	Opening Ceremony Plenary: Bastard	(Wybourne, Cook)
9:45 – 10:15	Coffee Break	
10:15-10:45	Invited: Wright	Invited: Akimov
10:45 – 12:25	Phonon Imaging & Acoustic Nonlinear Phonons (Paszkiewicz, Cook)	Low Dimensional Structures I (Challis, Stoneman)
12:25 – 2:00	Lunch	
2:00 – 2:30	Invited: Debernardi	Invited: Canzler
2:30 – 3:10	Lattice Dynamics (Cardona, Cook)	Phonon Transport (Maris, Stoneman)
3:10 – 3:30	Refreshments	
3:30 – 5:30	Lattice Dynamics (Debernardi, Cook)	Phonon Transport (Maris, Stoneman)

#### Tuesday 14 August

9:00 – 9:45 9:45 – 10:15	Plenary: Stroscio Invited: Merlin	( Tamura, Cook)
10:15 – 10:45	Coffee Break	
10:45 – 12:05	Coherent Phonons ( Merlin, Cook)	Electron Phonon Interactions (Kent, Stoneman)
12:05 – 2:00	Lunch	
2:00 – 2:30	Invited: Egami	Invited: Hu
2:30 – 3:00	Invited: Bussmann-Holder Invited: Uragami (Stroscio, Stoneman)	
3:00 – 3:30	Refreshments	
3:30 – 4:50	Phonons in Complex States of Matter	Phonon Engineering
4:50 - 5:30	Low Dimensional Structures II (Mellor, Cook)	New Techniques (Msall, Stoneman)

#### Wednesday 15 August

9:00 – 9:45 9:45 – 10:15	Plenary: Schwab Invited: Buks	(Worlock, Cook)	
10:15 – 10:45	Coffee Break		
10:45 – 12:25	MEMS (Schwab, Cook)	Defects (Wigmore, Stoneman)	

#### Thursday 16 August

9:00 – 9:45 9:45 – 10:15	Plenary: Enss Invited: Elliot (Nakayama, Cook)	
10:15 – 10:45	Coffee Break	
10:45 – 11:15	Invited: Vallée	Invited: Keppens
11:15 – 12:15	Nanostructures I (Nishiguchi, Cook)	Glasses I (Hunklinger, Stoneman)
12:15 – 2:00	Lunch	
2:00 – 3:20	Nanostructures II (Dijkhuis, Cook)	Glasses II (Elliot, Stoneman)
3:20 – 3:50	Refreshments	
3:50 – 5:50	Nanostructures III & Surfaces and Interfaces (Vallée, Cook)	Glasses III & Fluids (Enss, Stoneman)

#### Friday 17 August

9:00 – 9:45 9:45 – 10:15	Plenary: Wyatt Invited: Mellor	(Akimov, Cook)
10:15 – 10:45	Coffee Break	
10:45 – 12:05	Raman (Srivastava, Cook)	Particle Detectors New Techniques II (Wolfe, Stoneman)
12:15 – 12:45	Plenary: Cardona	(Lassmann, Cook)
12:45 – 1:00	Closing Ceremony	(Wybourne, Cook)

#### 13 August, Monday

Time	Paper Number	Corresponding Author	Title
8:30-9:00	Opening Ceremony		
9:00-9:45	M-PL	G. Bastard	Electron-Phonon Interaction and Energy
			Relaxation in InAs Quantum Dots.
9:45-10:15	Coffee Break		
10:15-10:45	M-In-2	O.B. Wright	Real Time Imaging and Dispersion of Surface Phonons
10:45-11:05	M-PI-1	J.P. Wolfe	A Spin-Density-Wave Ground State in Pb? Experimental Evidence from Phonon Imaging
11:05-11:25	M-PI-2	D. Lehmann	The Phonon-Drag Effect in Low-Mobility Gallium Nitride Epilayers
11:25-11:45	M-ANP-1	JY. Prieur	Acoustic Solitons, Phonon Echoes, and Sound Amplification in Si:B at Very Low Temperatures
11:45-12:05	M-ANP-2	S.V.Dmitriev	Thermally Activated Generation, Motion and Annihilation of Localized Modes in Anharmonic Chains
12:05-12:25	M-ANP-3	V. Hizhnyakov	Quantum Theory of Anharmonic Gap Modes
12:25-2:00	Lunch		
2:00-2:30	M-In-4	A. Debernardi	Isotopic Effect on Phonon Lifetime of Semiconductors
2:30-2:50	M-LD-1	M. d'Astuto	Phonon Dispersion Studies of Crystalline Systems using High Energy Resolution Inelastic X-Ray Scattering (IXS)
2:50-3:10	M-LD-2	M.Y. Hu	Vibrational Dynamics of Sn in Sn/a-Si Multilayers
3:10-3:30	Refreshments		
3:30-3:50	M-LD-3	P.M. Gehring	Dynamical Studies of the Polarized Nano- Regions in Relaxor Ferroelectrics using the Soft Polar Mode as a Probe
3:50-4:10	M-LD-4	M.I Aroyo	Applications of Phonon Extinction Rules for Inelastic Neutron Scattering and Thermal Diffuse Scattering Experiments
4:10-4:30	M-LD-5	A.I. Kolesnikov	Lattice Dynamics of High-Pressure Hydrides of the Group VI-VIII Transition Metals
4:30-4:50	M-LD-6	M. Giehler	Anharmonicity of the E <sub>2</sub> (high) and A <sub>1</sub> (LO) Phonons in GaN Studied by Temperature- Dependent Raman Spectroscopy
4:50-5:10	M-LD-8	M.M. Sinha	Study of Zone-Center Phonons in Lithium Manganese Oxide
5:10-5:30	M-LD-9	D.A. Semagin	Self-Localized States as Precursors of a Strong First-Order Structural Phase Transition
5:30-5:50	M-ANP-4	D.A. Semagin	Effect of Weak Discreteness on Two-Soliton Collisions in Nonlinear Schrödinger Equation

#### 13 August, Monday

Time	Paper Number	Corresponding Author	Title
9:45-10:15	Coffee Break		
10:15-10:45	M-In-1	A.V. Akimov	Spin-Phonon Dynamics in Doped Magnetic Quantum Wells
10:45-11:05	M-LDS-1	A.J. Kent	Phonon Emission By Optically Pumped Indium Arsenide Quantum Dots in Gallium Arsenide
11:05-11:25	M-LDS-2	K. Král	Relaxation of Electron-Energy in Polar Semiconductor Double Quantum Dots
11:25-11:45	M-LDS-4	O. Matsuda	Wavelength Selective Photoexcitation of Picosecond Acoustic Phonon Pulses in a Triple GaAs/Al <sub>0.3</sub> Ga <sub>0.7</sub> As Quantum Well Structure
11:45-12:05	M-LDS-5	I.Yu. Smirnov	Phonon-Assisted High Frequency Hopping Conductance in GaAs/AlGaAs Heterostructures in the Quantum Hall Effect Regime: Acoustic Studies
12:05-2:00	Lunch		
2:00-2:30	M-In-3	T.W. Canzler	Coherent Phonon Wavepackets in Quasi-1D Organic Molecular Crystals
2:30-2:50	M-PT-1	S. Tamura	Power-Law Decay of Quasidiffusive Phonons
2:50-3:10	M-PT-2	T.I. Galkina	Propagation of Acoustic Phonons Across the Interfaces in CdTe and Si/CVD-Diamond and Quasi-Two-Dimensional Phonon Wind in CdTe/ZnTe Quantum Wells
3:10-3:30	Refreshments		
3:30-3:50	M-PT-3	B.C. Daly	Molecular Dynamics Studies of Heat Flow in Two and Three Dimensions
3:50-4:10	M-PT-5	A. Smontara	Acoustic and Thermal Transport Properties of Hard Carbon Formed From C <sub>60</sub> Fullerene
4:10-4:30	M-PT-6	B. Ravinder Reddy	Effect of Strontium on Electrical and Atomic Properties of Pb (Li <sub>1/4</sub> La <sub>1/2</sub> W <sub>1/2</sub> )O <sub>3</sub> Ceramics

#### 14 August, Tuesday

Time	Paper Number	Corresponding Author	Title
9:00-9:45	Tu-PL	M.A. Stroscio	Phonons in Nanostructures: Device Applications
9:45-10:15	Tu-In-1	R. Merlin	Coherent Phonon-Polaritons and Subluminal Cerenkov Radiation
10:15-10:45	Coffee Break		
10:45-11:05	Tu-CP-1	H.W. de Wijn	Generation and Propagation of Coherent Phonon Beams
11:05-11:25	Tu-CP-2	D.A. Reis	Ultrafast X-Ray Diffraction From Coherent Phonons
11:25-11:45	Tu-CP-3	M. Hase	Coherent Phonons in Bismuth Under High- Density Excitation
11:45-12:05	Tu-CP-4	A.V. Bragas	Resonant Impulsive Generation of Coherent Optical Phonons in Quantum Dots
12:05-2:00	Lunch		
2:00-2:30	Tu-In-2	T. Egami	Electron-Phonon Interactions in HTSC Cuprates
2:30-3:00	Tu-In-4	A. Bussmann-Holder	Phonon Induced Charge Modulations and Mesoscale Pattern Formations in High Temperature Superconductors
3:00-3:30	Refreshments		
3:30-3:50	Tu-CSM-1	J.C. Lasjaunias	Slow Energy Relaxation in Quasi-1D Conductors at Low Temperature
3:50-4:10	Tu-CSM-2	K. Biljakovic	Phase Excitations in Charge Density Wave Systems Versus Soft-Modes and TLS in Glasses
4:10-4:30	Tu-CSM-3	JY. Duquesne	Elastic Waves Interaction in Icosahedral Al Pd Mn
4:30-4:50	Tu-CSM-4	A.L. Burin	Fluctuations of Conformational States in Biological Molecules: Theory for Anomalous Kinetics of Hole Burning
4:50-5:10	Tu-LDS-1	S.A. Cavill	Frequency Dependence of Acoustic Phonon- Assisted Tunnelling in Semiconductor Superlattices
5:10-5:30	Tu-LDS-2	F. de León-Peréz	Long-Wavelength Nonpolar Phonons in Semiconductor Heterostructures
5:30-5:50	Tu-LDS-3	V.M. Menon	Interface Phonon Mediated Quantum Cascade Terahertz Emitter

#### 14 August, Tuesday

Time	Paper Number	Corresponding Author	Title
10:15-10:45	Coffee Break		
10:45-11:05	Tu-EP-1	J.J. Tu	A Systematic Optical Study of Phonon Properties in Optimally Doped Bi <sub>2</sub> Sr <sub>2</sub> CaCu <sub>2</sub> O <sub>8+8</sub> Single Crystals
11:05-11:25	Tu-EP-2	A. Sergeev	Electron-Phonon Scattering in Disordered Metallic Films
11:25-11:45	Tu-EP-3	W. Grill	Electron-Phonon Interaction Observed in Ballistic Carrier Propagation Experiments
11:45-12:05	Tu-EP-4	N. Grigorchuk	Explicit Form for Exciton Damping with LO- Phonon Dispersion
12:05-2:00	Lunch		
2:00-2:30	Tu-In-3	Q. Hu	Electron-Phonon Scattering in THz Emitters and Electronics
2:30-3:00	Tu-In-5	Urayama	Differential Transmission Measurement of Phonon Bottleneck in Self-Organized Quantum Dot Intersubband Relaxation
3:00-3:30	Refreshments		
3:30-3:50	Tu-PE-1	M.A. Stroscio	Confinement and Amplification of Terahertz Acoustic Phonons in Cubic Heterostructures
3:50-4:10	Tu-PE-2	Ümit Özgür	Generation and Control of Coherent Acoustic Phonons in InGaN Multiple Quantum Wells
4:10-4:30	Tu-PE-3	D. Romanov	Optical Phonons in GaN/AlN Quantum Dots: Leaky Modes and Electron Energy Relaxation
4:30-4:50	Tu-PE-4	X. Bai	Quantum Well Based Detectors for Phonon and Far-Infrared Detector Applications
4:50-5:10	Tu-NT-1	O.L. Muskens	Propagation of Ultrashort Acoustic Wave Packets in PbMoO <sub>4</sub>
5:10-5:30	Tu-NT-2	B. Perrin	Theoretical and Experimental Picosecond Ultrasonics Investigations of Multilayered Systems

#### 15 August, Wednesday

Time	Paper Number	Corresponding Author	Title
9:00-9:45	W-PL	K. Schwab	Measurement of Quantized Energy Transport
9:45-10:15	W-In	E. Buks	Electrically Tunable Collective Modes in a MEMS Resonator Array
10:15-10:45	Coffee Break		
10:45-11:05	W-MEMS-1	D.H. Santamore	Effect of Surface Roughness on Phonon Thermal Conductance in the Quantum Limit
11:05-11:25	W-MEMS-2	X. Liu	Low Temperature Internal Friction Study of Loss Mechanisms of Mechanical Oscillators
11:25-11:45	W-MEMS-3	R. Lifshitz	Phonon Mediated Dissipation in Micro-and Nano-Mechanical Systems
11:45-12:05	W-MEMS-4	A.D. Armour	Electromechanical Which-Path Interferometer
12:05-12:25	W-MEMS-5	W. Fon	Phonon Scattering Mechanisms in Suspended Nanostructures from 4 to 40K
	Lunch		
2:15	Buses leave for excursion		

#### 15 August, Wednesday

Time	Paper Number	Corresponding Author	Title
10:15-10:45	Coffee Break		
10:45-11:05	W-D-1	L.I. Deych	Local Polaritons and Optical Properties of Mixed Polar Crystals
11:05-11:25	W-D-2	P.G. Klemens	Effects on Point Defects on the Decay of the LO Mode
11:25-11:45	W-D-5	K. Lassmann	Phonon Scattering of Oxygen-Related Defects in Annealed Silicon Crystals
	Lunch		
2:15	Buses leave for excursion		

#### 16 August, Thursday

Time	Paper Number	Corresponding Author	Title
9:00-9:45	Th-PL	C. Enss	Beyond the Tunneling Model: Quantum Phenomena in Ultracold Glasses
9:45-10:15	Th-In-1	S.R. Elliott	Vibrational Excitations in Structures with Topological and Lattice Disorder
10:15-10:45	Coffee Break		
10:45-11:15	Th-In-3	F. Vallée	Acoustic Vibration of Metal Nanoparticles: a Local Probe of their Environment
11:15-11:35	Th-N-1	M.R. Geller	Phonons in a Nanoparticle Mechanically Coupled to the Environment
11:35-11:55	Th-N-2	G.A. Antonelli	A Study of the Vibrational Modes of a Nanostructure with Picosecond Ultrasonics
11:55-12:15	Th-N-3	S. Mentese	Atomic Dynamics of Rapidly Quenched and Annealed Nanocrystalline Ni <sub>89</sub> Hf <sub>11</sub>
12:15-2:00	Lunch		
2:00-2:20	Th-N-4	J. Hone	Quantized Phonon Spectrum of Single-Walled Carbon Nanotubes
2:20-2:40	Th-N-5	N. Nichiguchi	Dynamic Effects on Electron Transport in Linked Metal Nanoparticles
2:40-3:00	Th-N-6	M.R. Geller	Mesoscopic Thermal Transport Through a Weak Link
3:00-3:20	Th-N-7	W.E. Lawrence	Phonon Description and the Euler Buckling Instability of a Nanoscopic Bar at Fixed Strain
3:20-3:50	Refreshments		
3:50-4:10	Th-N-8	M.I. Vasilevskiy	Dipole-Active Optical Vibrations Confined in Semiconductor Quantum dots
4:10-4:30	Th-N-9	J.C. Galzerani	Raman Spectroscopy Characterization of InAs Self-Assembled Quantum Dots
4:30-4:50	Th-S-1	G.P. Srivastava	Vibrational Properties of the As Deposited InP(110) Surface
4:50-5:10	Th-S-2	P. Zielinski	Reflection of Acoustic Waves From a Surface in the Presence of an Anharmonic Defect
7:00	Buses leave for BBQ		

#### 16 August, Thursday

Time	Paper Number	Corresponding Author	Title
10:15-10:45	Coffee Break		
10:45-11:15	Th-In-2	V. Keppens	When Does a Crystal Conduct Heat Like a Glass?
11:15-11:35	Th-G-1	J.A. Krumhansl	The Boson Peak in Crystals: A Remembrance of Things Past
11:35-11:55	Th-G-2	P. Häussler	Influences of Local Spherical Periodic Order on Dynamic Excitations and Low-T Transport Properties
11:55-12:15	Th-G-3	J.C. Li	The First Observation of Boson Peak from Water Vapour Deposited Amorphous Ice
12:15-2:00	Lunch		
2:00-2:20	Th-G-4	T. Nakayama	Microscopic Buckling as an Origin of Peculiar Dynamics of Glasses at THz Frequencies and Below
2:20-2:40	Th-G-5	P. Strehlow	Quantum Effects of Electromagnetic Fluxes in Cold Glasses
2:40-3:00	Th-G-6	P. Nalbach	Dynamic Entanglement of Interacting Tunneling Systems
3:00-3:20	Th-G-7	F. Bert	Tunneling States in Crystals with Large Unit Cell
3:20-3:50	Refreshments		
3:50-4:10	Th-G-8	R. König	Temperature and Intensity Dependence of the Acoustic Properties of Normal- and Superconducting Amorphous Metals at Low Temperatures
4:10-4:30	Th-G-9	A.L. Burin	Nonlinear Relaxation of Interacting Two Level Systems in Amorphous Solids
4:30-4:50	Th-G-10	N.I. Agladze	Influence of Impurities on Two Level Systems in Amorphous Ice
4:50-5:10	Th-G-11	J.J. Tu	Low-Frequency Raman Study of Glass-like Properties of Mixed Crystals with the Fluorite Structure
5:10-5:30	Th-F-1	TM. Wu	Local Geometric Structures of Instantaneous Resonant Modes in Gallium Liquids
7:00	Buses leave for BBQ		

#### 17 August, Friday

Time	Paper Number	Corresponding Author	Title
9:00-9:45	F-PL-1	A.F.G. Wyatt	Anisotropic Phonon Systems in Liquid <sup>4</sup> He
9:45-10:15	F-In	C.J. Mellor	Ballistic Phonon Interactions with the Fractional Quantum Hall Liquid
10:15-10:45	Coffee Break		
10:45-11:05	F-R-1	K. Morita	Raman Spectra of <sup>70</sup> Ge/ <sup>76</sup> Ge Isotope Heterostructures with Argon 488nm and 514.5nm Excitations
11:05-11:25	F-R-2	M.L. Sanjuán	Raman Study of Zn <sub>1-x</sub> Mn <sub>x</sub> Ga <sub>2</sub> Se <sub>4</sub> Diluted Magnetic Semiconductors at Room Temperature: Disorder and Resonance Effects
11:25-11:45	F-R-3	Y. Wang	Effect of Nanophase Separation on the Crystallization Process in Ge-Se Glasses Studied by Raman Scattering
11:45-12:05	F-R-4	P. Umari	Modeling of the Raman spectrum of Vitreous Silica
12:15-12:45	F-PL-2	M. Cardona	Recent Developments in Phonon Physics: Overview and Future Outlook
12:45-1:00	Closing Ceremony		

#### 17 August, Friday

Time	Paper Number	Corresponding Author	Title
10:15-10:45	Coffee Break		
10:45-11:05	F-PD-1	J.K. Wigmore	Heat Pulse Studies of Quasiparticle Dynamics in Superconducting Tunnel Junction Photon Detectors
11:05-11:25	F-PD-2	A.G. Kozorezov	The Anomalies of the Quasiparticle Current in Superconducting Multiple Tunnelling Junctions
11:25-11:45	F-NT-1	J. Kulda	Neutron TAS Spin-Echoa Handle on Anharmonic Effects in Lattice Dynamics
11:45-12:05	F-NT-2	G.A. Antonelli	A New Method for the Generation of Surface Acoustic Waves of High Frequency

#### Paper Numbering Key

Paper numbers that appear on the schedule are organized as follows:

#### **Day – Session – Presentation Number**

#### Session codes:

PL – Plenary

In – Invited

PI – Phonon Imaging

ANP - Acoustic Nonlinear Phonons

LD – Lattice Dynamics

LDS – Low Dimensional Structures

PT – Phonon Transport

CP – Coherent Phonons

CSM – Phonons in Complex States of Matter

EP – Electron Phonon Interactions

PE – Phonon Engineering

NT – New Techniques

MEMS - Micro & Nano Electromechanical Systems

D – Defects

N – Nanostructures

S – Surfaces and Interfaces

G – Glasses & Disordered Systems

R - Raman

PD – Particle Detectors

PTr – Phase Transitions

IE – Isotope Effects

#### **Poster Session I**

13 August, Monday. 7:30-9:30 pm

Poster Number	Session	Corresponding Author	Title
Po-I-1	ANP	S.V. Dmitriev	Fractal Structures in Multi-Soliton Collisions
Po-I-2	ANP	Y.Hiki	Computer Experiments on Phonons and Solitons in Two-Dimensional Hexagonal Crystals
Po-I-3	ANP	W. Singhsomroje	Studies of Dispersion and Soliton Formation of Longitudinal Acoustic Phonons in Crystalline Solids
Po-I-4	PT	B.C. Daly	Measurements of the Thermal Conductivity of Thin Film Amorphous Materials
Po-I-5	PT	H.W. de Wijn	Relaxation of an Optically Created Phonon Void
Po-I-6	PT	H. Fujishiro	Thermal Diffusivity of La <sub>1-x</sub> Ca <sub>x</sub> MnO <sub>3</sub> up to 1200 K
Po-I-8	PT	M. Ikebe	Effect of Oxygen Content Variation on Phonon Heat Transport in $La_{0.75}Ca_{0.25}MnO_{3+\delta}$
Po-I-9	PT	V.V. Ivanov	The Scattering of Non-Equilibrium Phonons in Al <sub>2</sub> O <sub>3</sub> Nanoceramics
Po-I-10	PT	V.A.	Thermal Transport by Extended and Localized Phonons in Mixed
		Konstantinov	Cryocrystals
Po-I-11	PT	C. Laermans	Ultrasound Versus Thermal Conductivity in Ge Clathrates
Po-I-12	PT	A. Melikyan	Thickness Dependence of Sound Velocity in Ultrathin Metallic Films
Po-I-13	PT	A. Sergeev	Phonon Drag in Disordered Films and Structures
Po-I-14	PT	A. Smontara	Anisotropy in Thermal Conductivity of (TaSe <sub>4</sub> ) <sub>2</sub> I
Po-I-15	PT	T. Takase	Debye Type Saw Attenuation in C <sub>60</sub> Thin Films Below Glass Transition Temperature
Po-I-16	PT	S. Volz	Si Crystal Thermal Conductance in the TeraHertz Frequency Range by Molecular Dynamics
Po-I-17	EP	A. Alatas	Measurement of the Valence Electron form Factor of Simple Metals from Phonon Intensities
Po-I-18	EP	H. Fujishiro	Anomalous Phonon Transport Enhancement at First-Order Ferromagnetic Transition in (Gd, Sm, Nd) <sub>0.55</sub> Sr <sub>0.45</sub> MnO <sub>3</sub>
Po-I-20	EP	N. Grigorchuk	New Features of Exciton and Polariton Attenuation on the LA-phonons of Crystals
Po-I-21	EP	V.A. Lykah	About Existing of the 'Rotation' Polaron in Molecular Cryocrystals
Po-I-22	EP	S.I. Manokhin	Electron-Phonon Scattering and Thermoelectric Power of High- Temperature Superconductors
Po-I-23	EP	Y.S. Ponosov	E <sub>2g</sub> Phonon Self-Energies in HCP Transition Metals at High Pressure
Po-I-24	EP	V.V. Samedov	Probable Explanation of Spatial Dependence of STJ Response in Experiments with LTSEM
Po-I-25	EP	D. A. Semagin	Resonance Magneto-Electric Effects Near the Surface in a Dielectric
Po-I-26	EP	P.C. Sharma	Phonon Scattering by Electrons in Doped Semiconductors in Intermediate Concentration Region
Po-I-27	EP	M.R. Singh	Acoustic Phonon and Dressed Polariton Interaction in Dispersive and Photonic Band Gap Materials
Po-I-28	EP	M. Tkach	Peculiarities of electron-Phonon Interaction in Quantum Wire embedded into Semiconductor Medium (HgS/CdS)
Po-I-29	EP	M. Tkach	Electron Spectrum Renormalized Due to Interaction with L- and I- Phonons in Quantum Dot Embedded Into Semiconductor Medium (GaAs/Al <sub>x</sub> Ga <sub>1-x</sub> As)
Po-I-30	EP	V.G. Tyuterev	An Alternative Approach to the Calculation of the Electron-Phonon Interaction in the Semiconductor Nanostructures

	1		
Po-I-31	EP	C.C. Wu	Nonlinear Effects of Energy Band Structures on Optical Transitions in Quantum Dots
Po-I-32	EP	C. C. Wu	Effect of Electron-Phonon Scattering Mechanisms on Free-Carrier
			Absorption in Quasi-One-Dimensional Structures
Po-I-33	EP	H. Yamada	Energy Relaxation Dynamics in Harper Model Coupled with a Small
10133		11. Tulliada	Number of Phonon Modes
Po-I-34	NT	M. Heitz	Study of Elastic Properties of Solids Using a Novel SQUID Detection
10151	111	141. 110102	Technique
Po-I-35	СР	K. Ishioka	Coherent Acoustic Phonon-Defect Scattering in Graphite
Po-I-36	CP	S.S. Makler	The Coherence of the AlGaAs-GaAs Phonon Laser
Po-I-37	CP	T. Saito	Ultrafast Acoustic Phonon Pulse Generation in Transition Metals
Po-I-38	CP	H. Takeuchi	Coherent Folded Acoustic Phonons in GaAs/AlAs Superlattices with
10130		11. Takedelli	Limited Periodicity
Po-I-39	СР	L.G. Tilstra	Phonon Avalanches in an Acoustic Cavity
Po-I-40	CP	F. Tsuruoka	Life Time of Phonon Hole
Po-I-41	D	O. Chukova	Electron-Phonon Interaction in Emission Centers Formed by Impurity
10-1-41	ש	O. Chukova	Pr <sup>3+</sup> and Dy <sup>3+</sup> Ions in Cadmium Tungstate Crystals
Po-I-42	D	L.I. Deych	Tunable Local Polariton Modes in Semiconductors
Po-I-43	D	C. Enss	Influence of Random Internal Fields on the Tunneling of Point Defects in
P0-1-43	ען	C. Eliss	Alkali Halide Crystals
Po-I-44	D	C. Enss	Phonon Spectroscopy of Tunneling States in NaCl:OD
Po-I-45	D	A. N. Kislov	Experimental Measuring and Numerical Calculations of Vibrations
FU-1-43	ען	A. IV. KISIOV	Associated with Ni Charged Impurities in ZnSe:Ni
Po-I-46	D	M. Ohta	Localized Relaxation in Stabilized Zirconia
	PI	A.J. Kent	
Po-I-47			Nonradiative Processes and Phonon Emission in GaAsN Alloys
Po-I-48	PI	T. Paszkiewicz	Application of Ultrasonic Measurements to Determination of the Orientation to Crystalline Samples
Po-I-49	PI	Y. Sugawara	Real Time Imaging and Analysis of Surface Acoustic Waves in TeO <sub>2</sub>
Po-I-50	PI	Y. Tanaka	Images of Phonons Transmitted Across Twist-Bonded (111)- Oriented
			Cubic Crystals: Symmetry Doubling in the Ballistic Intensity
Po-I-51	LDS	S.M. Badalyan	Joule Heat in a Two-Dimensional Electron Gas Exposed to a Normal
			Non-Homogeneous Magnetic Field of a "Chess" Configuration
Po-I-52	LDS	S. Dickmann	Non-Radiative Magnetoexciton Relaxation Arising in Superlattice Due to
			LO-Phonon Emission
Po-I-53	LDS	R.B. Dunford	The Acoustoelectric Response of Double Layer 2D Hole Systems
Po-I-54	LDS	M. V. Kisin	Interband Phonon Assisted Tunneling in InAs-GaSb Heterostructures
Po-I-55	LDS	H. C .Lee	Dependence of Averaged Electron Energy Loss Rate on Well Width and
			Al Composition in GaAs/Al <sub>x</sub> Ga <sub>1-x</sub> As Quantum Wells
Po-I-56	LDS	D. Lehmann	About the Shortcomings of Using Fang-Howard Electron Wavefunctions
			for Phonon Emission Rate Calculations in Single Heterostructures
Po-I-57	LDS	S. Mizuno	Resonant Interaction of Bulk Phonons with Phonons Localized at a Superlattice-Liquid Interface
Po-I-58	LDS	S. Tamura	Anomalously Enhanced Group Velocities of Phonons in Finite
10120	LDS	S. Tumuru	Superlattices
Po-I-59	LDS	Y. Tanaka	Band Structures and Transmission Properties of Acoustic Waves in
			Phononic Lattices
Po-I-60	CSM	M. Gulacsi	Spin and Lattice Effects in the Kondo Lattice Model
Po-I-61	CSM	D. Louca	Pressure-Induced Atomic disorder in the Heavy Fermion CeCu <sub>2+x</sub> Si <sub>2</sub>
10101	221,1	2.2000	Using Neutron Diffraction
Po-I-62	Late	H. Shima	The Forced Oscillator Method Incorporating with the fast time-evolution
			algorithm
Po-I-63	Late	S.P. Sanyal	Vibrational Excitations in Single-Walled Carbon Nanotube
Po-I-64	Late	S.P. Sanyal	Lattice Vibrational Properties of Ba <sub>1-x</sub> K <sub>x</sub> BiO <sub>3</sub>
	1		1 18 8 3

#### **Poster Session II**

14 August, Tuesday 7:30 – 9:30 pm.

Poster Number	Session	Corresponding Author	Title
Po-II-1	G	F. Bert	Tunneling States and Defects in Quasicrystals
Po-II-2	G	H. Fukazawa	Inelastic Neutron Scattering of High-Density and Low-Density Amorphous Ice
Po-II-3	G	A. Gladun	Grüneisen Parameter of D-doped Nb <sub>37</sub> Ti <sub>63</sub> at Temperatures Below 10 K
Po-II-4	G	V. Hizhnyakov	Effect of Pressure on Soft Excitations in Glasses: Theory and Experiment
Po-II-5	G	B.E. Hubbard	Infrared and Raman Study of Two-Level Systems in Fiber Optic Quality a-SiO <sub>2</sub> and a-SiO <sub>2</sub> : GeO <sub>2</sub>
Po-II-6	G	M. Jäckel	Influence of High Pressure on the Specific Heat of Amorphous Polymers
Po-II-7	G	R König	Influence of Sample Preparation on the Glass-Like Acoustic Properties of Pure Crystalline Tantalum
Po-II-8	G	C. Laermans	Density of States of Interacting Quasilocal Harmonic Modes in Glasses
Po-II-9	G	R.L. Lepsveridze	Low-Temperature Nuclear Spin-Lattice Relaxation in Amorphous Materials
Po-II-10	G	J. C. Li	Hydrogen Defect Vibrations in Various Phase Deuterium Ices
Po-II-11	G	V.N. Novikov	Picosecond Vibration Relaxation in Glasses
Po-II-12	G	V.A. Osipov	Glass-Like Heat Conduction in Materials with Disclination- Induced Topological Disorder
Po-II-13	G	T. Ozaki	Far-Infrared Absorption Due to Thermally Activated Relaxation in Vitreous Silica
Po-II-14	G	M. A. Parshin	Boson Peak in Neutron-Irradiated Quartz Crystal
Po-II-15	G	M. Saint-Paul	Elastic Properties of Disordered Solids Below 100K
Po-II-16	G	G. Weiss	Non-Linearities and Magnetic Field Dependencies of the Dielectric Constant of Ba0 Al <sub>2</sub> O <sub>3</sub> SiO <sub>2</sub>
Po-II-17	G	G. Weiss	Acoustic Measurements of Crystalline Aluminium and of an Aluminium Alloy (Al 5056)

Po-II-18	MEMS	A. D. Armour	Transport Via a Quantum Shuttle
Po-II-19	MEMS	M.P. Blencowe	Quantum Dynamics of a Cooper-Pair Box Coupled to a
10 11 15	11121112	Tital : Bronce ive	Micromechanical Resonator
Po-II-20	MEMS	D. M. Photiadis	Thermal Elastic Loss Observed in a High Q Mechanical
			Oscillator
Po-II-21	MEMS	Y. Zhang	Noise Analysis and Sensitivity of a Micromechanical
			Displacement Detector Based on the Radio-Frequency Single-
			Electron Transistor
Po-II-22	PD	J.K. Wigmore	Scattering of THz Phonons
Po-II-23	N	A.M. Alcade	Acoustic and Optical Phonon Emission Rates in Spherical
			Quantum Dots: Magnetic Effects
Po-II-24	N	A. L. Burin	Semiclassical Theory for Dissipative Tunneling Towards the
			Medium
Po-II-25	N	S.M. Carr	Crossover Between Quantum and Thermal Regimes in
			Nanostructures
Po-II-26	N	G.C. Ishiekwene	Polaron Effects in Quantum Dots
Po-II-27	N	J. C. Lasjaunias	Low Temperature Specific Heat of Single-Wall Carbon
			Nanotubes
Po-II-28	N	M. Tkach	Phonons Influence on the Electron Spectrum in Superlattice
			Consisting of Quantum Dots
Po-II-29	N	T. Toyoda	Influence of Anodization Period on the Photoacoustic Spectra of
			Porous Silicon
Po-II-30	N	T. Toyoda	Photoacoustic and Photoluminescence Spectra of Manganese
			Doped Nanocrystals of ZnS With and Without Modification by
			Carboxylic Acids
Po-II-31	N	T. Toyoda	Effect of Size Confinement of CdSe Nanocrystals in a GeO <sub>2</sub>
			Glass Matrix Characterized by Photoacoustic Spectroscopy
Po-II-32	F	S. Hosokawa	Studies of Collective dynamics in Liquid Ge Over a Wide
			Temperature Range Using Inelastic X-Ray Scattering Technique
Po-II-33	F	J. Li	Neutron Spectroscopy Investigation of Water and Water in
			Biomaterials
Po-II-34	F	G. Matsui	Non-Gaussianity of Translational and Rotational Degrees of
			Freedom in Supercooled Liquid
Po-II-35	F	Y. Okuda	Melting by Sound in Solid <sup>4</sup> He
Po-II-36	R	P. Kosoboutski	Phonon Reflection Light by Crystals
Po-II-37	R	H. Kuroe	Low-Frequency Excitations in the Charge-Ordered Phase of
			(Nd <sub>0.5</sub> Sr <sub>0.5</sub> )MnO <sub>3</sub>
Po-II-38	R	I. Tehver	Mode Mixing Via Resonance Raman Excitation Profiles
Po-II-39	PTr	M. Heitz	Phase Separation in Binary Rare Gas Mixtures
Po-II-40	PTr	S.G. Nedilko	Displaying of Local Structural Phase Transitions in Raman
D II 41	D.T.		Spectra of Alkali Sulphates
Po-II-41	PTr	T. Yagi	Brillouin and Raman Scattering Studies of the Isotopically
D. II 40	DT.	D. C1.:11.	Induced Ferroelectric Phase Transition of SrTi <sup>18</sup> O <sub>3</sub>
Po-II-42	PTr	P. Schilbe	Raman Scattering in VO <sub>2</sub>
Po-II-43	PTr	T. Shigenari	Debye-Waller Factor Due to the Phase Fluctuation in the
D. H. 47	DT.	D 7:-1:1:	Incommensurate Phase: Strange Behavior in SiO <sub>2</sub>
Po-II-45	PTr	P. Zielinski	Anharmonic Effects of Constant Measuring Field in
Do II 46	IE	A Dugamany 11-1.1	Determination of Susceptibility Near Phase Transitions
Po-II-46	IE	A. Bussmann-Holder	Isotope Effects on the Ferroelectric Phase Transition
Do II 47	IE	I.C. Vularian	The Normal Phonon Scottering Processes and the Thormal
Po-II-47	IE	I.G. Kuleyev	The Normal Phonon Scattering Processes and the Thermal
			Conductivity of Germanium Crystals with the Various Isotopic
L	<u> </u>		Compositions

Po-II-48	IE	V. G. Plekhanov	Isotope and disorder Effects in Lattice Dynamics of LiH <sub>x</sub> D <sub>1-x</sub> Mixed Crystals
Po-II-49	S	E.S. Syrkin	Density of States of Surface and Volume Excitations and Local
			Oscillations in the Quasi-Low-Dimensional Systems
Po-II-50	S	S. Tamura	Electron Contribution to the Attenuation of Surface Phonons in
			Metallic Superlattices
Po-II-51	LD	A.I. Barabash	The Investigation of Peculiarities of Structure, Lattice Dynamics
			and Phase Transitions in Hydrogen-Bonded Crystals by NQR
			Methods Under Hydrostatic Pressure
Po-II-52	LD	L.A. Brussaard	Phason Mode in n-Alkane/Urea Composites
Po-II-53	LD	J.S. Kim	Analytic Solution for Finite Linear Chain with Two General
			Impurities under General Boundary Condition
Po-II-54	LD	I.N. Kudryavtsev	Lattice Dynamics and Heat Capacity of Solid Nitrogen
Po-II-55	LD	I.N. Kudryavtsev	Low-Dimensional Effects and Lattice Dynamics in Anisotropic
			Cuprate HTS
Po-II-56	LD	I.N. Kudryavtsev	Some Peculiarities of Niobium Lattice Dynamics in
			Superconducting Transition Region
Po-II-57	LD	S.G. Lushnikov	Central Peak in the Vibrational Spectrum of the Relaxor
			Ferroelectric
Po-II-58	LD	T. Paszkiewicz	Determination of the Symmetry Classes of Elastic Crystalline
			Bodies
Po-II-59	LD	T. Paszkiewicz	Unified Description of Elastic and Acoustic Properties of Cubic
			Media: Elastic Instabilities, Phase Transitions and Soft Modes
Po-II-60	LD	S. E.Popov	The Lattice Dynamics of Pure LaMnO <sub>3</sub>
Po-II-61	LD	A. Sabry	Phonon dispersion Curves of SrFCl
Po-II-63	LD	M.M. Sinha	Interionic Forces and Phonons in Superionic Conductor
			CsPbCl <sub>3</sub>
Po-II-64	LD	G. P. Srivastava	Lattice Dynamics of the Zinc-Blende and Wurtzite Phases of
			Nitrides
Po-II-65	LD	U. Straube	Elastic, Dielectric and Piezoelectric Coefficients of Langasite-
			Type Crystals
Po-II-66	LD	K. Wakamura	Observation of Low Energy Optical Phonon in the β-Phase of
			CuI
Po-II-67	PE	M. Msall	New Angles of Phonon Refraction
Po-II-68	PE	H.C. Lee	Dependence of Electron-Optical Phonon Interaction on the Al
			Composition in GaAs/Al <sub>x</sub> Ga <sub>1-x</sub> As Quantum Well Structures