

## PROGRAM 1/2

Thursday 11 October 2018				
8:30-8:45	Registration	CNRS Délégation Rhône Auvergne, 2 Avenue Albert Einstein, 69100 Villeurbanne		
8:45-9:00	Wellcome Talk and GDRE "Thermal Nanosciences and NanoEngineering" history			
9:00-10:40	Session 1:	<b>Ballistic Transport, chairman S. Merabia</b>		
	9:00-9:25	S1.1	<b>R. Anufriev</b>	Ballistic heat transport in Si nanowires at different length-scales and Temperature
	9:25-9:50	S1.2	<b>X. Alvarez</b>	Collective and hydrodynamic behavior in thermal transport
	9:50-10:15	S1.3	<b>J. Maire</b>	The impact of heat on optomechanical cavities' properties
	10:15-10:40	S1.4	<b>M. Markov</b>	Hydrodynamic heat transport in bismuth: a theoretical viewpoint
10:40-11:00	Coffee Break			
11:00-12:55	Session 2:	<b>Thermal Radiation I, chairmain R. Vaillon</b>		
	11:00-11:25	S2.1	<b>F-J. Jaramillo</b>	Passive cooling of surfaces using colloidal crystals as infrared thermal blackbodies
	11:25-11:50	S2.2	<b>I. Latella</b>	Radiative Heat Shutting
	11:50-12:15	S2.3	<b>A. Ott</b>	Magneto-optical thermal Hall effect, angular momentum, and Spin
	12:15-12:40	S2.4	<b>C. Kathmann</b>	Limitations of the kinetic theory to describe the nearfield heat exchanges in manybody systems
	12:40-13:05	S2.5	<b>E. Blandre</b>	Optical design, fabrication and characterization of microstructured surfaces for radiative cooling applications
13:05-14:00	Lunch			
14:00-15:40	Session 3:	<b>Conduction in disordered and nanocomposite materials, chairwoman I. Zardo</b>		
	14:00-14:20	S3.1	<b>DeSousa Oliveira</b>	Molecular dynamics simulations in disordered nanoporous materials
	14:20-14:40	S3.2	<b>A. Tanguy</b>	Wavepackets transport and Thermal Conductivity in Amorphous solids
	14:40-15:00	S3.3	<b>S. Merabia</b>	Enhancing the thermal transport properties of soft materials using nanoparticles
	15:00-15:20	S3.4	<b>V. Giordano</b>	Disorder dominated thermal transport in chalcogenide-based nanocomposites: a microscopic investigation
	15:20-15:40	S3.5	<b>F. Lund</b>	The phonon-dislocation interaction: A contemporary approach
15:40-16:00	Flash Poster Session			2 minutes per poster, 1-2 pages
16:00-17:00	Posters and coffee			
17:00-18:30	Presentation of Current Projects (EU/others) and discussions			
18:30-20:00	Free time, enjoy a Lyon style "apero"			
20:00-23:00	Dinner	Maison Villemanty, 25 Montée Saint-Sébastien, 69001 Lyon		
Friday 12 October 2018				
8:30-10:10	Session 4:	<b>Nanomaterials: non-equilibrium and relaxation, chairman X. Alvarez</b>		
	8:30-8:55	S4.1	<b>A. Fontana</b>	Fluctuations in a NESS: is there a universal behavior ?
	8:55-9:20	S4.2	<b>M. Luisier</b>	Modelling of Self-Heating in Nanoscale Devices
	9:20-9:45	S4.3	<b>R. Maioli</b>	Ultrafast Thermo-Optical Dynamics of Metal Nano-objects
	9:45-10:10	S4.4	<b>J. Paterson</b>	Thermal conductivity measurements of nanostructured thin films
10:10-10:30	Coffee Break			
10:30-11:45	Session 5:	<b>Thermal Radiation II, chairman P. Ben-Abdallah</b>		
	10:30-10:55	S5.1	<b>T. Takahashi</b>	Photo-assisted Scanning Probe Microscopy on Cu(In,Ga)Se <sub>2</sub> Solar Cells
	10:55-11:20	S5.2	<b>C. Lucchesi</b>	Near-field radiative heat transfer experiments for thermophotovoltaic conversion: temperature and material dependence
	11:20-11:45	S5.3	<b>A. Alwakil</b>	Thermal Radiation Illusion using Transformation Optics and Mantle Cloaks
11:45-13:00	Session 6:	<b>Thermoelectrics and thermionics, chairwoman V. Giordano</b>		
	11:45-12:10	S6.1	<b>R. Bachelet</b>	Decreasing thermal conductivity by atomic engineering in epitaxial oxide films for enhanced integrated thermoelectricity
	12:10-12:35	S6.2	<b>M. Prunnila</b>	Thermionics and phonon blocking by semiconductorsuperconductor junctions
	12:35-13:00	S6.3	<b>M. Bescond</b>	Evaporative electron cooling in asymmetric double barrier semiconductor heterostructure
13:00-14:00	Lunch			
14:00-15:30	Discussion on output of GDRe and on future networks/actions			
15:30	Closing remarks			

Last meeting of the CNRS GDRe (2015-2018) on "Thermal Nanosciences and NanoEngineering"

## PROGRAM 2/2

Poster Session	Thuesday 11 October, 15:40-17:00
P1 <b>J. Amrit</b>	Thermal conductivity measurements of a 200 µm-thick Silicon Sample between 0.3 K and 2 K
P2 <b>E. Guen</b>	Thermal conductivity measurements using resistive scanning thermal micro and nanoprobes
P3 <b>P. Guiraud</b>	Modelling of Thermoacoustic Efect for Sound Generation
P4 <b>G. Hamaoui</b>	Nano-scale thermophysical characterization using a high frequency photothermal radiometry technique
P5 <b>F. Lamberti</b>	Phonon engineering in GaAs/AlAs Micropillars
P6 <b>H. Luo</b>	From mean-free path to attenuation lengths in a 2D solid with circular inclusions
P7 <b>M. Markov</b>	Breakdown of Herring's processes in cubic semiconductors for sub-Thz longitudinal acoustic phonons
P8 <b>M. Markov</b>	Semi-metals as potential thermoelectric materials
P9 <b>A. Metjari</b>	Thermal Measurements for Nanomaterials using Scanning Thermal Microscopy
P10 <b>B. Pottier</b>	Thermo-optical bistability of micro-cantilevers
P11 <b>D. Singhal</b>	Highly-Dense Forest of Nanowires for Thermoelectrics
P12 <b>W. Zhao</b>	Towards the Investigation of Thermal Properties of Nano-Objects in a TEM