



Program



Wednesday 12 December 2007

8:30 Registration

9:00 Opening by F. Glas

- 9:10 **P.M. Koenraad**, TU Eindhoven (invited)
STM analysis of magnetic impurities and magnetically doped nanostructures
- 9:50 **J.-M. Jancu**, LPN CNRS Marcoussis
Atomistic simulations in materials science: from bulk properties to nanostructures
- 10:10 **V.G. Dubrovskii**, Ioffe Institute, St.-Petersburg
Role of nucleation in the formation of semiconductor quantum dots and nanowires

10:40 Coffee break

- 11:00 **M.-A. Dupertuis**, EPFL Lausanne (invited)
The interest of a maximal symmetrization and reduction of fields in semiconductor nanostructures: application to electrons, holes, excitons and polarons
- 11:40 **P. L. Galindo**, U Cádiz
Parallel software for the simulation of HAADF-STEM images of large semiconductor nanostructures
- 12:00 **A. Freundlich**, U Houston
Real time metrology of self-assembled InAs/GaAs quantum dots by reflection high-energy electron diffraction

12:30 Lunch

- 14:00 **J. Stangl**, U Linz (invited)
X-ray analysis of semiconductor nanostructures: beyond the ensemble average
- 14:40 **A. Ponchet**, CEMES Toulouse
Surface effects in the 2D-3D transition of InAs grown on InP by molecular beam epitaxy
- 15:00 **W. Lu**, INSA Rennes
InAs quantum dots grown on GaAsSb buffer layer lattice matched on InP
- 15:20 **A. Schliwa**, TU-Berlin
Optical QD properties as quantitative fingerprints of structural and chemical properties

15:50 Coffee Poster break

- 16:30 **P. Kratzer**, U Duisburg (invited)
Atomistic modelling of the growth of InAs quantum dots on GaAs
- 17:10 **L. Largeau**, LPN CNRS Marcoussis
Facet and in-plane crystallographic orientations of GaN nanowires grown on Si(111)
- 17:30 **V. M. Fomin**, U Antwerpen
Theory of the electron energy spectrum and the Aharonov-Bohm effect in single- and two-electron self-assembled $\text{In}_x\text{Ga}_{1-x}\text{As}/\text{GaAs}$ quantum rings

18:00

20:00 Dinner



Program



Thursday 13 December 2007

8:30 ...

9:00 C. Colliex, U Paris-Sud (invited)
 STEM/EELS atomic level characterization of individual nanostructures

9:40 D. L. Sales, U Cádiz
 Finite element simulation of the elastic energy of semiconductor quantum wires in their initial growth stage

10:00 J. Houel, U Paris-Sud
 Absorption spectro-nanoscropy of single semiconductor quantum dots using an atomic force microscope in the mid-infrared

10:30 Coffee break
 10:50

10:50 G. Bester, MPI Stuttgart
 Atomistic theory of excitonic effects in nanostructures

11:30 J. Even, INSA Rennes
 Electronic properties and non-linear piezoelectric potential in narrow gap strained semiconductor quantum nanostructures with axial symmetry

11:50 J. Johansson, U Lund
 Influence of supersaturation on the crystal structure of gold seeded GaP nanowires

12:20 Lunch
 13:40

13:40 F. Peeters, U Antwerpen (invited)
 Electronic structure calculation of self-assembled quantum dots and molecules

14:20 I. D. Drouzas, U Sheffield
 InAs self-assembled quantum dots capped with a GaAsSb strain reducing layer

14:40 M. Winkelkemper, TU Berlin
 Recombination dynamics of localized excitons in InGaN/GaN quantum dots

15:00 F. Glas, LPN CNRS Marcoussis
 Nucleation at the triple phase line and wurtzite formation in nanowires of zinc-blende III-V semiconductors

15:20 Closing remarks
 15:30

Wednesday 12 December 2007 - Poster session

15:50 M. Bozkurt, TU Eindhoven
 Mn and Fe Doped InAs Quantum Dots Studied by X-STM
J.G. Lozano, U Cádiz
 Characterization of the misfit dislocation networks in InN quantum dots grown on GaN
M. Mixa, U Charles Prague
 Kinetic Monte Carlo simulation of quantum-dot nucleation in PbSe/PbEuTe multilayers
E.S. Semenova, LPN CNRS Marcoussis
 Growth and characterisation of single quantum dot on GaAs substrate emitting at 1.55 μm

16:30