

Workshop “ Modern Applications of Gross-Pitaevskii equations : The Bose-Einstein Condensation ”

Wolfgang Pauli Institut, Vienna
Nordbergstrasse 15
6-9 November, 2006

PROGRAM

Monday, November 6

14:00-15:00 : L. Bergé

Stability of ground states and vortices of matter-wave condensates and optical guided waves: Some approximation methods and numerical computations

15:30- 16:30 : L. Bronsard

Vortices in rotating toroidal Bose-Einstein Condensates

Tuesday, November 7

9:30-10:30 : D. Jaksch

Bose-Einstein condensation in optical lattices

coffee break

11:00-12:00 : G. Fibich

Waves in nonlinear lattices: Ultrashort optical pulses and Bose-Einstein condensates

14:00-15:00 : A. de Bouard

A stochastic NLS equation arising in Bose-Einstein condensation

15:30- 16:30 : S. Cuccagna

Estimates on the heat kernel with imaginary time for autonomous Schrodinger operators in 1 D with space periodic potential

Wednesday, November 8

9:30-10:30 : R. Fukuizumi

Stability of standing waves for a nonlinear Schrodinger equation with a repulsive Dirac delta potential

coffee break

11:00-12:00 : L. Pareschi

Modelling and numerics of quantum kinetic equations

14:00-15:00 : X. Blanc

Fast rotating Bose-Einstein condensates

15h30- 16h30 : B. Helffer

On the third critical field for type 2 superconductors

Thursday, November 9

9:00- 10:00 : C. Sparber

Effective mass theorems for the Gross-Pitaevskii equation

10:00-11:00 : L. Vega

Selfsimilar solutions of non-linear Schrodinger equations related to some geometric problems

coffee break

11:30-12:30 : R. Carles

NLS with potential: Cauchy problem and semi-classical limit.