

Workshop

The Gross-Pitaevskii and related equations with non-zero boundary conditions at infinity

Wolfgang Pauli Institute, Vienna
Nordbergstrasse 15
12-14 June, 2006

Program :

Monday, June 12

9:00 - 9:15 : Opening of the workshop

9:15 - 10:15 : Fabrice Bethuel - *Travelling waves for the Gross-Pitaevskii equation : some results and open questions*

10:15 - 10:45 : Coffee Break

10:45 - 11:45 : Dmitry Pelinovsky - *Review of results on existence, stability and properties of dark solitons*

11:45 - 12:45 : Philippe Gravejat - *Travelling waves for the Gross-Pitaevskii equation*

12:45 - 15:00 : Lunch

15:00 - 16:00 : Laurent Di Menza - *Stability of black solitons for one-dimensional NLS equations*

16:00 - 17:00 : Marc Brachet - *Sound emission and vortex shedding in quasi-steady solutions of the Gross-Pitaevskii equation*

Tuesday, June 13

9:00 - 10:00 : Robert Jerrard - *Vortex dynamics for the Gross-Pitaevskii equation : refined jacobian estimates and rates of convergence*

10:00 - 10:30 : Coffee Break

10:30 - 11:30 : Stephen Gustafson - *Stability of static solutions in equivariant Landau-Lifshitz dynamics*

11:30 - 12:30 : David Chiron - *Vortex helices for the Gross-Pitaevskii equation*

12:30 - 14:30 : Lunch

14:30 - 15:30 : Mihai Maris - *Travelling waves to a Gross-Pitaevskii-Schrodinger system*

15:30 - 16:30 : Weizhu Bao - *Numerical simulation of vortex dynamics in Ginzburg-Landau-Schrodinger equation*

Wednesday, June 14

9:00 - 10:00 : Dmitry Pelinovsky - *Oscillations of dark BEC solitons in a parabolic trap*

10:00 - 10:30 : Coffee Break

10:30 - 11:30 : Clément Gallo - *The Cauchy problem for Nonlinear Scrodinger equations on \mathbb{R}^N with non-vanishing data at infinity*

11:30 - 12:30 : Olivier Goubet - *Two remarks on solutions of Gross-Pitaevskii equations on Zhidkov spaces*

12:30 - 15:00 : Lunch

15:00 - 16:00 : Kenjii Nakanishi - *Global dispersive solutions for the Gross-Pitaevskii equation in two spatial dimensions*

16:00 - 17:00 : Problem session, perspectives and informal discussion

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