Levico - Fermi 2004 - Scientific program

Wednesday, March 3rd

20:00 Welcome drink

21:00-22:00 Dinner

Thursday, March 4th

8:30-9:15 **Tony Leggett** (Urbana)
Some general considerations regarding the dilute degenerate alkali gases

9:15-10:00 **Deborah Jin** (Boulder)
Making Condensates with a Fermi Gas of Atoms

10:00-10:30 Coffee break

10:30-11:15 **Henk Stoof** (Utrecht)
Kondo Physics and the BEC-BCS crossover

11:15-12:00 **Rudi Grimm** (Innsbruck)
Bose-Einstein condensation of $^6Li_2$ molecules: first experiments in the BEC-BCS crossover regime

12:00-14:15 Lunch

14:15-15:00 **Murray Holland** (Boulder)
A theory of resonant interactions in dilute quantum gases

15:00-15:45 **Wolfgang Ketterle** (MIT, Cambridge)
Bose-Einstein condensation of lithium molecules and studies of a strongly interacting Fermi gas

15:45-16:15 Break

16:15-17:00 **Gora Shlyapnikov** (AMOLF, Amsterdam)
Superfluid pairing in ultracold Fermi gases

17:00-17:45 **Christophe Salomon** (ENS, Paris)
Bose-Einstein Condensation of $^6Li_2$ fermion dimers near a Feshbach resonance

18:00-19:30 Poster Session 1

20:00-21:00 Dinner

Friday, March 5th

8:30-9:15 **Sandro Stringari** (Trento)
Collective oscillations in a trapped superfluid Fermi gas

9:15-10:00 **Immanuel Bloch** (Munich)
Fermionizing Bosons in Optical Lattice Potentials

10:00-10:30 Coffee break

10:30-11:15 **Roland Combescot** (ENS, Paris)
Molecular bound state and BCS instability in atomic Fermi gases with Feshbach resonance

11:15-12:00 **Tilman Esslinger** (Zürich)
Transition from a strongly interacting 1D superfluid to a Mott insulator

12:00-14:15 Lunch

14:15-15:00 **Yoji Ohashi** (Tsukuba)
Single-particle excitations and collective modes in a trapped Fermi gas near a Feshbach resonance

15:00-15:45 **John Thomas** (Durham)
Hydrodynamics of a Degenerate, Strongly-Interacting Fermi Gas

15:45-16:15 Break

16:15-17:00 **W. Zwerger**
BCS-BEC Crossover: Basics and an Exact Solution in 1D

17:00-17:45 **Ignacio Cirac** (MPI, Garching)
Bosonic and fermionic atoms in optical lattices

18:00-19:30 Poster Session 2

20:00-21:00 Dinner

Saturday, March 6th

8:30-9:15 **Duncan Haldane** (Princeton)
Feshbach Resonances in Rotating Fermi and Bose Condensates

9:15-10:00 **Hidetoshi Katori** (Tokyo)
Ultracold Fermions: Application to Ultrastable Optical Clock

10:00-10:30 Coffee break

10:30-11:15 **Maxim Kagan** (IPP, Moscow)
Two-particle Pairing and Creation of Composite Fermions in Fermi-Bose Gases

11:15-12:00 **Chris Pethick** (NORDITA, Copenhagen)
Properties of Fermi gases with resonant interactions

12:00-14:00 Lunch

14:00-14:45 **Giovanni Modugno** (Firenze)
Fermi gases in optical lattices

14:45-15:30 **Maciej Lewenstein** (Hannover)
Three challenges of AMO physics: From Bose-Fermi mixtures to quantum spin glasses and quantum spin liquids

16.00 Bus to Trento

17:00-18:30 Trento (Castle)

19:00 Trento (Concert)

20:30-23:00 Trento (Dinner)

23:00 Bus back to Levico

Sunday, March 7th

Departure.