



## Hybrid workshop

# Connections between Cold Atoms and Nuclear Matter: from low to high energies

### Villazzano, 6-10 June

#### **Topics**

In this workshop, theorists working in cold atoms and nuclear matter will be brought together to exchange ideas between the two fields. Given that ultracold atoms can be used as quantum simulators of situations that are relevant to nuclear matter, a few experimentalists working with ultracold bosons and fermions will present new results that require deeper theoretical understanding. Their presentations will stimulate cross pollination between theorists working in the two communities. Topics to be covered in the workshop include unitary gases, long-ranged dipolar interactions, optical lattices and lattice chromodynamics, artificial spin-orbit coupling, supersolidity and collective excitations.

#### Organizers

Carlos **Sa de Melo** (Georgia Institute of Technology, Atlanta/US) Alexandros **Gezerlis** (University of Guelph, Guelph/CA)

#### **Key speakers**

Monica Aidelsburger (LMU Munich), Yvan Castin (ENL- Paris), Joe Carlson (Los Alamos), Gianluca Colò (Milan), Denis Lacroix (Orsay), Dean Lee (Michigan State), Piotr Magierski (Warsaw), Giovanni Modugno (Florence-Pisa), Henning Moritz (Hamburg), Sergej Moroz (Karlstad), Nir Navon (Yale), Amy Nicholson (North Carolina), Silke Ospelkaus (Hannover), Thomas Papenbrock (Tennessee), Guido Pupillo (Strasbourg), Alessio Recatti (Trento), Alessandro Roggero (Trento), Luis Santos (Hannover), Srimoyee Sen (Iowa State), Sandro Stringari (Trento), Andrea Trombettoni (University of Trieste), Michael Urban (Orsay), Senne van Loon (Gatech-Antwerp), Daisuke Yamamoto (Tokyo)

#### **Director of the ECT\*: Professor Gert Aarts**

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