

FUSTIPEN Topical Meeting

« Effective field theories for nuclear structure studies »

March 3, 2011, GANIL, Caen, France

Second Circular

This one-day workshop addresses some of the main issues posed by the many-body problem of nuclear structure to effective field theories (EFTs). A crucial issue in EFTs relates to our understanding of the hierarchy of all interactions allowed by the QCD symmetries, using ratios of the relevant momentum scales. The workshop aims to explore the role played by emerging many-body scales such as the Fermi momentum, from the conceptually simpler "ab-initio" approaches to existing formulations of "in medium" EFTs.

We will discuss these questions in a topical one-day meeting, keeping the format informal and leaving long time for discussions. We would also like to engage a discussion on where should nuclear EFTs go and what issues should be tackled in the future.

The meeting at the GANIL Guesthouse is scheduled to start at 9:30 and to finish around 17:30 on Thursday March 3.

There is no registration fee. The French-based physicists interested in the topic of the meeting can get the local support from the French FUSTIPEN grant.

Upon arrival at GANIL, you are requested first to contact the guardian at the entrance of GANIL and then proceed to the GANIL Guesthouse for the registration. Personal laptops will be able to connect to the wireless network. Since all external participants of the meeting will have to go through the same procedure, the whole process may take a while, and we suggest you arrive early enough.

Program of the Topical Meeting

9:00 - 9:30	Registration
9:30	Welcome
9:40 - 10:00	Bira van Kolck (University of Arizona) Some issues for EFT in the nuclear structure context
10:00 - 11:00	Hermann Krebs (FZ-Juelich) Lattice EFT calculations
Coffee break	
11:30 - 12:30	Andreas Nogga (FZ-Juelich) No-core shell model calculations from Chiral-EFT-based interactions
Lunch	
14:00 - 15:00	José Antonio Oller (University of Murcia) Chiral effective field theory for finite-density nuclear systems
15:00 – 16:00	Vittorio Soma (SPhN Saclay) Self-consistent Gorkov-Green's function calculations from Chiral-EFT interactions
Coffee break	
16:30 - 17:30	Discussion "Where should nuclear EFT go from here?"

To register, please fill in the registration form: http://fustipen.ganil.fr/Conferences/EFT%20workshop/Registration_form

We are asking even those holding a GANIL badge to register, so that an accurate count can be obtained for the coffee breaks.

Important!

The topical meeting will be preceded by three two-hour lectures by Bira van Kolck on «Introduction to Nuclear Effective Field Theories» to be held at FUSTIPEN on February 28 – March 2, 2011. Lectures will take place in room 105 of the GANIL main building. Each lecture begins at 9:30. Coffee will be served 15 minutes before the lecture.

To register for lectures, please fill in the registration form: http://fustipen.ganil.fr/Conferences/eftlecture/Registration_form

The French-based physicists interested in the topic of lectures can get the local support from the French FUSTIPEN grant.

We hope to see you at GANIL at the occasion of this topical meeting and the preceding lecture course.

Thomas Duguet (SPhN Saclay) Marek Płoszajczak (GANIL) Bira van Kolck (University of Arizona)