

# International Collaborations in Nuclear Theory: Theory for open-shell nuclei near the limits of stability

Scott K. Bogner (NSCL/Michigan State University), Morten  
Hjorth-Jensen (NSCL/Michigan State University) and Jason D.  
Holt (TRIUMF)

May 11-29, 2015, Michigan State University and FRIB/NSCL

## Venue: Lecture Hall at the National Superconducting Cyclotron Laboratory

We meet all at the **Theory Trailer** (Trailer nr. 7) on the eastern side of the [National Superconducting Cyclotron Laboratory](#) (640 South Shaw Lane on the MSU campus). We meet at 8.30am at the **Theory Trailer** for registration. Coffee plus light refreshments are served. Thereafter we walk over to the NSCL Lecture Hall.

Lectures start at 9am all days. The Theory Trailer is located close the construction site of the new NSCL/FRIB building (you will see a series of trailers). The Theory Trailer is the one closest to the [Wharton Center for performing arts at MSU](#) and Bogue street.

From the Town Place hotel it is a walk of at [most 20-25 min](#).

For those of you arriving by plane, if Detroit Metro is your final airport, we recommend using the [Michigan Flyer](#) bus service to East Lansing. Take thereafter a taxi to the Town Place hotel. If you are staying at the Kellogg conference center, they organize a shuttle transport from downtown East Lansing. If Lansing is your final airport, we recommend taking a taxi directly to the hotel.

Alternatively, you can use CATA bus line 14 and connect with bus

## Recording of lectures and live streaming

For those of you who cannot attend the lectures, these are streamed live (access only for people at the NCSL). The link to the website is <https://arachnid.nsl.msu.edu/video/icnt/>

## Program first week May 11-15 2015

Time	Monday
9am-10am	<a href="#">Andreas Ekstrom</a> (ORNL/UTK) Constraining the Description of the Nuclear Interaction      Cluste
10.0am-10.30am	Coffee break
10.30am-11.30am	<a href="#">Heiko Hergert</a> (MSU) Effective interactions and operators from IM-SRG
11.30am-2pm	Lunch
2pm-3.30pm	Discussions
3.30pm-4pm	Coffee break
4pm-6pm	Discussions

## Program second week May 18-22 2015

Time	Monday
9am-10am	<a href="#">Jimmy Rotureau</a> (ORNL/MSU) Towards optical potentials from coupled cluster theory
10am-11am	<a href="#">George Papadimitriou</a> (ISU) Structure and Reactions of nuclei using complex energy formalism
11am-11.30am	Coffee break
11.30am-12.30pm	<a href="#">Alexander Volya</a> (FSU) Shell-model approach to nuclear clustering
12.30pm-2pm	Lunch
2pm-3.30pm	Discussions
3.30pm-4pm	Coffee break
4pm-6pm	Discussions

## Program third week May 25-29 2015

Time	Monday
9am-10am	<a href="#">Luigi Coraggio</a> (INFN, Naples) A new double-step procedure for the derivation of effective shell-
10am-10.30am	Coffee break
10.30am-11.30am	<a href="#">Toshio Suzuki</a> (Tokyo) Evaluation of nuclear weak rates relevant to astrophysical
11.30am-2pm	Lunch
2pm-3.30pm	Discussions
3.30pm-4pm	Coffee break
4pm-6pm	Discussions