

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

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

Venue: Lecture Hall at the National Superconducting Cyclotron Laboratory/Nuclear Theory Conference Room

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. The third week all talks will be in Nuclear Theory Conference Room in the theory trailer. 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.**

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 NSCL). The link to the website is <https://arachnid.nsl.msu.edu/video/icnt/>

Program first week May 11-15 2015, Lecture hall NSCL

Time	Monday
9am-10am	Andreas Ekstrom (ORNL/UTK) Constraining the Description of the Nuclear Interaction
10.0am-10.30am	Coffee break
10.30am-11.30am	Heiko Hergert (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, Lecture Hall NSCL

Time	Monday
9am-10am	Jimmy Rotureau (ORNL/MSU) Towards optical potentials from coupled cluster theory
10am-11am	George Papadimitriou (ISU) Structure and Reactions of nuclei using complex energy formalism
11am-11.30am	Coffee break
11.30am-12.30pm	Alexander Volya (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, Conference Room Theory Trailer

Time	Monday
9am-10am	Luigi Coraggio (INFN, Napoli) A new double-step procedure for the derivation of effective interactions
10am-10.30am	Coffee break
10.30am-11.30am	Toshio Suzuki (Tokyo) Evaluation of nuclear weak rates relevant to astrophysics
11.30am-2pm	Lunch
2pm-3.30pm	Houda Naidja (Strasbourg) New Advances in the Shell Model Calculations: Applications around the N=28 shell gap
3.30pm-4pm	Coffee break
4pm-6pm	Discussions