

**Connecting Bound States to the Continuum
Facility for Rare Isotope Beams (FRIB)
June 11-22, 2018**

AGENDA

Start	Duration	Agenda Item/Talk title	Speaker
Monday, 11 June 2018 - 1221 A & B Conference Room			
9:00 AM	0:20	REGISTRATION	
9:20 AM	0:10	Welcome + goals CHAIR: H. Hergert	LAUNEY, Kristina
9:30 AM	1:00	01 Overview (Reactions - th.)	NUNES, Filomena
10:30 AM	0:20	<i>Coffee Break</i>	
10:50 AM	0:50	02 Overview of bound-state many-body methods	JOHNSON, Calvin
11:40 AM	0:20	Discussion and announcements	
12:00 PM	1:30	<i>Lunch</i> CHAIR: A. Volya	Atrium
1:30 PM	0:45	03 "Complex-energy configuration interaction approach"	NAZAREWICZ, Witold
2:15 PM	0:45	Discussion of workshop goals and working group format	Lead: TBD
3:00 PM	0:20	<i>Coffee Break</i>	
3:20 PM	1:40	Discussion of important questions in scattering and reaction theory	Lead: TBD
5:00 PM			
Tuesday, 12 June 2018 - 1221 A & B Conference Room			
		CHAIR: M. Caprio	
9:00 AM	0:45	04 "Overview of microscopic R-matrix approaches"	QUAGLIONI, Sofia
9:45 AM	0:45	05 "Configuration interaction studies of nuclear clustering"	VOLYA, Alexander
10:30 AM	0:20	<i>Break</i>	
10:50 AM	0:45	06 "Correlated Reference States and Effective Hamiltonians in the IMSRG Framework"	HERGERT, Heiko
11:35 AM	0:20	Discussions	
11:55 AM	0:05	Announcements	
12:00 PM	1:30	<i>Lunch</i>	Shaw Hall
1:30 PM	1:30	Topical discussions (working groups)	
3:00 PM	0:20	<i>Coffee Break</i>	
3:20 PM	1:40	Topical discussions (working groups)	
5:00 PM			



Wed 13 June 2018 - 1221 A & B Conference Room

Chair: K. Fossez

9:00 AM	0:45	07	"Spectroscopy of Continuum States - a review"	THOMPSON, Ian
9:45 AM	0:45	08	"Symmetry-adapted bases for ab initio structure and reaction theory"	MERCENNE, Alexis
10:30 AM	0:20		<i>Break</i>	
10:50 AM	0:45	09	Three-body approach to deuteron-nucleus scattering using realistic forces in a separable representation	HLOPHE, Linda
11:35 AM	0:20		Discussions	
11:55 AM	0:05		Announcements	
12:00 PM	1:30		<i>Lunch</i>	Shaw Hall
1:30 PM	1:30		Topical discussions (working groups)	
3:00 PM	0:20		<i>Coffee break</i>	
3:20 PM	1:40		<i>Topical discussions (working groups)/FRIB tour</i>	Tour group meet in FRIB Lobby
5:00 PM				

Thu, 14 June 2018 - 1221 A & B Conference Room

CHAIR: S. Quaglioni

9:00 AM	0:45	10	Single-State method within the HORSE (J-matrix) formalism	SHIROKOV, Andrey
9:45 AM	0:45	11	Reactions with clusters in harmonic oscillator basis.	KRAVVARIS, Konstantinos
10:30 AM	0:20		<i>Break</i>	
10:50 AM	0:45	12	"Symplectic no-core configuration interaction framework for ab initio nuclear structure"	CAPRIO, Mark
11:35 AM	0:20		Discussions	
11:55 AM	0:05		Announcements	
12:00 PM	1:30		<i>Lunch</i>	Shaw Hall
			<i>CHAIR: L. Hlophe</i>	
1:30 PM	0:45	13	"Natural orbital methods for nuclear structure"	FASANO, Patrick
2:15 PM	0:45		Topical discussions (working groups)	
3:00 PM	0:20		<i>Coffee Break</i>	
3:20 PM	1:40		Topical discussions (working groups)	
5:00 PM				

Fri, 15 June 2018 - 1221 A & B Conference Room

CHAIR: I. Thompson

9:00 AM	0:45	14	"Ab initio folding potentials for proton-nucleus scattering based on NCSM nonlocal one-body densities"	ELSTER, Charlotte
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9:45 AM	0:45	15	"Optical potentials and knockout reactions from Green functions treatment"	IDINI, Andrea
10:30 AM	0:20		<i>Break</i>	
10:50 AM	0:45	16	"Coupled Cluster Green's function for microscopic optical potentials"	ROTUREAU, Jimmy
11:35 AM	0:20		Discussions	
11:55 AM	0:05		Announcements	
12:00 PM	1:30		<i>Lunch</i>	Shaw Hall
			<i>CHAIR: J. Rotureau</i>	
1:30 PM	0:45	17	"Time-Dependent Basis Function approach to scattering"	VARY, James
2:15 PM	0:45		Topical discussions (working groups)	
3:00 PM	0:20		<i>Coffee Break</i>	
3:20 PM	1:40		Topical discussions (working groups)	
5:00 PM				

Mon, 18 June 2018 - 1221 A & B Conference Room

Chair: W. Nazarewicz

9:00 AM	0:45	18	"Berggren basis: Pedagogical overview"	FOSSEZ, Kevin
9:45 AM	0:45		Discussions	
10:30 AM	0:20		<i>Break</i>	
10:50 AM	0:45	19	Continuum shell model: the unified approach to nuclear structure and reactions"	PLOSZAJCZAK, Marek
11:35 AM	0:20		Discussions	
11:55 AM	0:05		Announcements	
12:00 PM	1:30		<i>Lunch</i>	Atrium
			<i>Chair: C. Brune</i>	
1:30 PM	0:45	20	"Gamow shell model with realistic nuclear forces"	XU, Furong
2:15 PM	0:45	21	No Core Gamow Shell Model	BARRETT, Bruce
3:00 PM	0:20		<i>Coffee Break</i>	
3:20 PM	1:40		Topical discussions (working groups)	
5:00 PM				
6:00 PM			workshop dinner - Sultans, 4790 S Hagadorn Road, East Lansing	

Tuesday, 19 June 2018 - 1221 A & B Conference Room

Chair: R. Navarro Perez

9:00 AM	0:45	22	"Signatures of few-body resonances in finite volume"	KOENIG, Sebastian
9:45 AM	0:45	23	"Nuclear structure and reactions in EFT"	RUPAK, Gautam
10:30 AM	0:20		<i>Break</i>	
10:50 AM	0:45	24	Connecting scattering with structure calculation through Improved Busch formula	ZHANG, Xilin
11:35 AM	0:20		Discussions	
11:55 AM	0:05		Announcements	
12:00 PM	1:30		<i>Lunch</i>	Shaw Hall



Chair: W. Dickhoff

1:30 PM	0:45	25	Solving the quantum mechanical problem, from Variational Monte Carlo to machine learning algorithms	HJORTH-JENSEN, Morten
2:15 PM	0:45		Topical discussions (working groups)	
3:00 PM	0:20		<i>Coffee Break</i>	
3:20 PM	1:40		Topical discussions (working groups)	
5:00 PM				

Wed, 20 June 2018 - 1221 A & B Conference Room

Chair: A. Shirokov

9:00 AM	0:45	26	"The dispersive optical model as an interface between ab initio calculations and experiment"	DICKHOFF, Willem
9:45 AM	0:45	27	"Nuclear reaction in a three body model: exploring the story in Q-space"	JIN, LEI
10:30 AM	0:20		<i>Break</i>	
10:50 AM	0:45	28	Connecting experimental data and the analytic S-matrix	BRUNE, Carl
11:35 AM	0:20		Discussions	
11:55 AM	0:05		Announcements	
12:00 PM	1:30		<i>Lunch</i>	
			<i>Chair: G. Rupak</i>	
1:30 PM	0:45	29	Connecting microscopic NN interactions with heavy nuclei through DFT"	NAVARRO PEREZ, Rodrigo
2:15 PM	0:45		Topical discussions (working groups)	
3:00 PM	0:20		<i>Coffee Break</i>	
3:20 PM	1:40		Topical discussions (working groups)	
5:00 PM				

THU, 21 June 2018 - 1221 A & B Conference Room

Chair: M. Ploszajczak

9:00 AM	0:45	30	"Nuclear structure aspects of double charge exchange transitions and the double Gamow-Teller resonance"	AUERBACH, Naftali
9:45 AM	0:45	31	"Level density, underlying physics and the constant temperature model"	ZELEVINSKY, Vladimir
10:30 AM	0:20		<i>Break</i>	
10:50 AM	0:45	32	"Many-body perturbation theory calculations"	U, Baishan
11:35 AM	0:20		Discussions	
11:55 AM	0:05		Announcements	
12:00 PM	1:30		<i>Lunch</i>	Shaw Hall
			<i>Chair: F.R. Xu</i>	



1:30 PM	0:45	33	"Methods to deal with an effective pairing in the continuum: real and complex energy representations"	ID BETAN, Rodolfo
2:15 PM	0:45		Topical discussions (working groups)	
3:00 PM	0:20		<i>Coffee Break</i>	
3:20 PM	1:40		Topical discussions (working groups)/FRIB tour	
5:00 PM				

Fri, 22 June 2018 - 1221 A & B Conference Room

Chair: C. Johnson

9:00 AM	0:45	34	"Lessons from the symmetry-adapted no-core shell model: collectivity, clustering, sum rules and scattering"	LAUNEY, Kristina
9:45 AM	0:45	35	TBD	MINOMO, Kosho
10:30 AM	0:20		<i>Break</i>	
10:50 AM	1:00	36	"Workshop Summary Talk"	ELSTER, Charlotte and ROTUREAU, Jimmy
11:50 AM	0:10		Discussions	
12:00 PM	1:30		<i>Lunch</i>	Shaw Hall
1:30 PM	1:00		Discussions	
2:30 PM			<i>Adjourn</i>	

