International Conference
**Nuclear Theory
in the Supercomputing Era – 2016
(NTSE-2016)**

Program

Pacific National University, Khabarovsk, Russia.
September 19–23, 2016.

Monday, September 19.

Conference Hall

9:00 – 9:40	Registration
9:40 – 10:00	**Conference opening.** **Sergey N. Ivanchenko, president PNU.** Welcome from Pacific National University
10:00 – 11:00	**James Vary.** *Ab initio* No-Core Shell Model with Leadership Class Supercomputers
11:00 – 11:20	Coffee break
	Chair: Charlotte Elster
11:20 – 12:20	**Carlo Barbieri.** Self-Consistent Green's Function Theory Computations of Medium Mass Isotopes
12:20 – 13:20	**Furong Xu.** CGSM and MBPT Calculations with Realistic Nuclear Forces
13:20 – 14:20	Lunch
	Chair: Roman Skibiński
14:20 – 15:20	**Andrey Shirokov.** *NN* Interaction Daejeon16
15:20 – 16:20	**Kimiko Sekiguchi.** Approach to Three Nucleon Forces from Experiment
16:20 – 16:40	Coffee break

Room 201

16:40 – 18:00	Discussions, additional questions to speakers *Discussion leader: Viktor Efros*
18:30	Welcome Party

Tuesday, September 20.

Conference Hall

Chair: Andrey Shirokov

9:00 – 10:00	**Viktor Efros.** An Approach to the Computation of Few/Many-Body Multichannel Reactions
10:00 – 11:00	**Charlotte Elster.** Reactions with Light Nuclei
11:00 – 11:20	Coffee break

Chair: Kimiko Sekiguchi

11:20 – 12:20	**Alexander Motovilov.** Structure of *T*-Matrices on Unphysical Energy Sheets and Few-Body Resonances
12:20 – 13:20	**Roman Skibiński.** Modern two-nucleon forces in three-nucleon reactions
13:20 – 14:20	Lunch

Chair: Noritaka Shimizu

14:20 – 15:20	**Xingbo Zhao.** Time-dependent Basis Function Approach to Nuclear Scattering
15:20 – 16:20	**Kai Wen.** The Inertial Mass and Collective Path in Nuclear Fusion/Fission Reactions
16:20 – 17:10	**Nikolay Khokhlov.** Deuteron Wave Function and Elastic eD Scattering
17:10 – 17:30	Coffee break

Room 201

17:30 – 18:50	Discussions, additional questions to speakers *Discussion leader: James Vary*

Wednesday, September 21.

Conference Hall

Chair: John Hill

9:00 – 10:00	**Joel Lynn.** Quantum Monte Carlo Calculations with Chiral Effective Field Theory Interactions
10:00 – 11:00	**Youngman Kim.** Nuclear Mass Table Project with Relativistic Continuum Hartree-Bogoliubov Theory
11:00 – 11:20	Coffee break

Chair: Sergey Yakovlev

11:20 – 12:20	**Shan-Gui Zhou.** Nuclear Tetrahedral Shapes from MDC-CDFT
12:20 – 13:20	**Junchen Pei.** Continuum DFT Studies of Exotic Nuclei and Dynamics
13:20 – 14:20	Lunch

Chair: Yuri Tshuvil'sky

14:20 – 15:20	**Noritaka Shimizu.** Large-Scale Shell-Model Studies for Exotic Nuclei and Nuclear Level Densities
15:20 – 16:20	**Alexander Mazur.** Analysis of Resonant States within the SS HORSE Method
16:20 – 16:50	**Myeong-Hvan Mun.** Study of Low-Energy Phase Shift using NCSM with Three Different *NN* Interactions
16:50 – 17:10	Coffee break

Room 201

17:10 – 18:30	Discussions, additional questions to speakers *Discussion leader: Luigi Coraggio*

Thursday, September 22.

Conference Hall

Chair: Alexander Motovilov

9:00 – 10:00	**Olga Rubtsova.** Solution of Few-Body Scattering Problems in a Discrete Representation by Using GPU
10:00 – 11:00	**Luigi Coraggio.** Large-Scale Shell-Model Challenges within the RIB Era
11:00 – 11:20	Coffee break

Chair: Carlo Barbieri

11:20 – 12:20	**Sergey Yakovlev.** Scattering in the System of Three Charged Particles
12:20 – 13:00	**Sergey Zaytsev.** Electron Correlations in the Framework of Quasi Sturmian Functions Approach
13:00 – 14:00	Lunch

Room 201

14:00 – 15:10	Discussions, additional questions to speakers *Discussion leader: Furong Xu*
15:10 – 19:30	Excursion
19:30	Conference Dinner

Friday, September 23.

Conference Hall

Chair: Youngman Kim

9:00 – 10:00	**John Hill.** Highlights from the 15 Year Heavy Ion Program at the PHENIX Experiment
10:00 – 11:00	**Yurii Tchuvil'sky.** Asymptotic Properties of Resonance and Weakly-Bound States in the Shell-Model Calculations
11:00 – 11:20	Coffee break

Chair: Shan-Gui Zhou

11:20 – 12:10	**Alexander Soloviev.** The Algebraic Versions of the Resonating Group Model and the Orthogonality Conditions Model as Fundamentals of Theoretical Approaches for Describing Nuclear Reactions
12:10 – 12:50	**Igor Mazur.** Energy and Width of the Resonance in the 4n System
12:50 – 13:20	**Vasily Kulikov.** S-matrix Method for Extrapolation of the Results of No-Core Shell Model Calculations
13:20 – 14:20	Lunch

Public Lectures

14:20 – 15:20	**James Vary.** Role of Supercomputers in Basic Science Simulations
15:20 – 16:20	**Victor Efros.** Quantum Mechanics of Reactions with Many Open Channels (in Russian)
16:20 – 16:40	Coffee break

Room 201

16:40 – 18:00	Discussions, additional questions to speakers *Discussion leader: Andrey Shirokov*
18:00	Conference closing

Saturday, September 24.

Conference Hall

Public Lectures

10:00 – 11:00   **Yurii Tchuvil'sky.** Current Status and Prospects of Nuclear Physics Research (in Russian)