

The 2017 ICNT Program at FRIB:

Extracting Bulk Properties of Neutron-Rich Matter with Transport Models in Bayesian Perspective

FRIB-MSU, East Lansing, Michigan, USA

March 22 - April 12, 2017

The allocated time in parenthesis includes discussion.

Week 2 (Transport 2017)

Monday, Mar 27 (RM 1200 & 1221B)

Recent Experimental Results I (RM 1200)

— 08:30-09:00 registration —

Chair: Byungsik Hong

09:00-09:05 (5 min)

Thomas Glasmacher

Welcome

09:05-09:15 (10 min)

Alex Brown

ICNT program at MSU

09:15-09:45 (30 min)

Betty Tsang

Transport Code Comparison Project

09:45-10:15 (30 min)

Mizuki Kurata-Nishimura

SpiRIT-TPC experiments at RIKEN 2016

10:15-10:45 (30 min)

Brent Barker

Shear Viscosity from nuclear stopping

— 10:45-11:15 coffee break —

Chair: Yvonne Leifels

11:15-11:35 (20 min)

Abdelouahad Chbihi

Review of selected experimental observables

11:35-11:55 (20 min)

Alan McIntosh

Equilibration Chronometry: Measuring the Time Dependence of N/Z Equilibration Neck fragmentation

11:55-12:20 (25 min)

Enrico de Filippo

Experimental observables and transport models: a challenge in HIC from low to high energy regime

— 12:20-14:00 lunch (on your own) —

Box Simulation Overview (RM 1200)

Chair: Roy Wada

14:00-14:30 (30 min)

Yvonne Leifels

Benchmarking transport theory

14:30-15:00 (30 min)

Yingxun Zhang

Description of box calculation Hw1&Hw2, and preliminary analysis results / Understanding results of box calculation Hw1: nucleon-nucleon scattering and Pauli blocking

15:00-15:15 (15 min)

Maria Colonna

Understanding results of box calculation Hw2: nucleon evolution in a mean -field potential

— 15:15-15:45 coffee break —

Chair: Maria Colonna

15:45-16:00 (15 min)

Jun Xu

Description of box calculation Hw3, and preliminary analysis results

16:00-16:15 (15 min)

Akira Ono

Understanding results of box calculation Hw3: production of pion-like particles

16:15-17:15 (60 min)

Maria Colonna

discussions

Tuesday, Mar 28 (RM 1200 & 1221B)

Bayesian Analysis (RM 1200)

Chair: Hermann Wolter

09:00-10:00 (60 min)

Earl Lawrence

A Quick Intro to Bayes and An Example of Inference Using a Physics Model

10:00-10:30 (30 min)

Scott Pratt

Big Models vs. Big Data, a Bayesian Approach

— 10:30-11:00 coffee break —

11:00-11:30 (30 min)

Yingxun Zhang

Bayesian inference on effective mass and its splitting from HICs

11:30-12:00 (30 min)

discussion

— 12:00-13:30 lunch (on your own) —

Pion Physics (RM 1200)

Chair: Girodano Cerizza

13:30-14:00 (30 min)

Tetsuya Murakami

Pion data and transport model calculations

14:00-14:30 (30 min)

Che-Ming Ko

Medium effects on pion production in HIC

14:30-15:00 (30 min)

Pawel Danielewicz

pions with pBUU

— 15:00-15:30 coffee break —

Chair: Che-Ming Ko

15:30-16:00 (30 min)

Natsumi Ikeno

Production of pions and clusters in HIC by AMD+JAM

16:00-16:30 (30 min)

Mircea Dan Cozma

Relevance of a proper total energy conservation in transport models

16:30-17:00 (30 min)

discussions

— 17:00-18:30 free time —

Special Evening Session on Bayesian Method (RM 1200)

18:30-20:00 (90 min)

Pawel Danielewicz

discussions with Earl Lawrence

Wednesday, Mar 29 (RM 1200 & 1221B)

Microscopic Interactions (RM 1200)

Chair: Alan McIntosh

09:00-09:30 (30 min)

Ruprecht Machleidt

Recent progress in high-precision chiral nuclear forces

09:30-10:00 (30 min)

Diego Lonardonì

Chiral forces and quantum Monte Carlo: from nuclei to neutron star matter

10:00-10:30 (30 min)

Francesca Sammarruca

Applications of modern chiral interactions in neutron-rich matter

— 10:30-11:00 group photo and coffee break —

Chair: Francesca Sammarruca

11:00-11:30 (30 min)

Morten Hjorth-Jensen

Nuclear Matter EoS from first principle methods; recent advances and challenges

11:30-12:00 (30 min)

Jeremy Holt

discussion

— 12:00-13:30 lunch (on your own) —

Recent Experimental Results II & Participant Codes Description I (RM 1200)

Chair: Jerzy Lukasik

13:30-13:50 (20 min)

Giuseppe Verde

Space-time characterization of particle emission: observables and model predictions

13:50-14:10 (20 min)

Tadaaki Isobe

Application of transport model to design experiments

14:10-14:30 (20 min)

Roy Wada

High energy proton emission and transport models in intermediate heavy ion collisions

14:30-14:50 (20 min)

Bill Lynch

discussion on wish list to transport codes

Chair: Natsumi Ikeno

14:50-15:10 (20 min)

Pawel Danielewicz

pBUU description

15:10-15:30 (20 min)

Maria Colonna

SMF description

— 15:30-16:30 FRIB tour (*sign up instructions will be available*) —

16:30-16:50 (20 min)

Jun Xu

IBUU description

16:50-17:10 (20 min)

Zhen Zhang

RVUU description

Thursday, Mar 30 (RM 1200 & 1221B)

EOS in Astrophysics (RM 1200)

Chair: Andrew Steiner

09:00-09:30 (30 min)

Charles Horowitz

Neutrino response in Supernova matter from transport models

09:30-10:00 (30 min)

Luke Roberts

The Impact of the Nuclear EoS on the Long Term Supernova Neutrino Signal

10:00-10:30 (30 min)

Francesco Pederiva

Nuclear EOS from QMC

10:30-11:00 (30 min)

Andrew Steiner

discussion

— 11:00-11:30 *coffee break* —

— 11:30-13:00 lunch (on your own) —

Participant Codes Description II (RM 1200)

Chair: Giuseppe Verde

13:00-13:30 (30 min)

Tatsuhiko Ogawa

Radiation transport simulation code PHITS and its hadronic reaction models

13:30-13:50 (20 min)

Yingxun Zhang

ImQMD description

13:50-14:10 (20 min)

Mircea Dan Cozma

TuQMD description

14:10-14:30 (20 min)

Akira Ono

AMD and JAM description

— 14:30-15:00 coffee break —

Chair: Tatsuhiko Ogawa

15:00-15:20 (20 min)

Dmytro Oliinychenko

Heavy ion collisions with SMASH transport approach

15:20-15:40 (20 min)

Chang-Hwan Lee

New Heavy-Ion Transport Code: Daejeon BUU

15:40-16:10 (30 min)

Hermann Wolter

Summary of transport code description

16:10-17:00 (50 min)

Jun Xu

Discussions of action plans (including discussions on pions)

— 17:00-18:30 free time —

— 18:30-20:00 group dinner (out of pocket) —

Friday, Mar 31 (RM 1200)

Transport Applications

Chair: Zbigniew Chajecki

09:00-09:30 (30 min)

Jerzy Lukasik

Using transport calculations as event generators to design experiments

09:30-10:00 (30 min)

Mikhail Kostin

transport calculations for shielding applications

10:00-10:30 (30 min)

Arnaud Le Fevre

Constraining EOS, Friga

— 10:30-11:00 coffee break —

Chair: Dan Cozma

11:00-11:30 (30 min)

Emanuele Pagano

Investigation of Dynamical and statistical PLF Fission competition using IMF correlation functions and comparisons with CoMDII model

11:30-12:00 (30 min)

Yongjia Wang

UrQMD description

— 12:00-13:30 lunch (on your own) —

Chair: Abdelouahad Chbihi

13:30-14:00 (30 min)

Akira Ono

Cluster production in AMD model

14:00-14:30 (30 min)

Zbigniew Chajecki

Comparisons to AMD.

— 14:30-15:00 coffee break —

15:00-15:30 (30 min)

Bill Lynch

Cluster production in experiments

15:30-16:00 (30 min)

Pawel Danielewicz

Cluster Production in pBUU - Past and Future

16:00-16:30 (30 min)

Hermann Wolter

Discussions on cluster production in transport models

Saturday, Apr 01

Discussions

13:00-16:00 (180 min)

discussions (need arrangement for access)

Sunday, Apr 02

Bayesian Discussion

09:00-12:00 (180 min)

Michael Grosskopf

Discussion (need arrangement for access)

— 12:00-13:00 lunch (*on your own*) —

13:00-16:00 (180 min)

discussions (need arrangement for access)

Updated on 04/12/17 21:55:33 EDT.