

# Program of the Helmholtz International Summer School (HISS) on “Dense Matter”, Dubna, 29.06. - 11.07.2015

1<sup>st</sup> week (Conference Hall of the Bogoliubov Laboratory for Theoretical Physics)

| Time/Date    | Monday<br>29.06.                                | Tuesday<br>30.06. | Wednesday<br>01.07.     | Thursday<br>02.07. | Friday<br>03.07. | Saturday<br>04.07. |
|--------------|---|-------------------|-------------------------|--------------------|------------------|--------------------|
| 9:30 - 10:30 | Registration<br>(9:00-10:00)<br>Opening (10:00) | Hempel            | Hoffmann                | Bratkovskaya       | Bravina          | Kaczmarek          |
| Coffee Break |   |                   |                         |                    |                  |                    |
| 11:00-12:00  | Ohnishi   | Kolomeitsev       | Cleymans                | Bratkovskaya       | Bravina          | Randrup            |
| 12:00-13:00  | Kaminski  | Castorina         | Randrup                 | Hoffmann           | Bleicher         | Bleicher           |
| Lunch Break  |   |                   |                         |                    |                  |                    |
| 15:00-16:00  | Castorina                                       | Kaczmarek         | Laboratory<br>Excursion | Kaempfer           | Cleymans         | Wong               |
| Coffee Break |   |                   |                         |                    |                  |                    |
| 16:30-17:30  | Hempel  | Kaminski          | Kolomeitsev             | Randrup            | Kaempfer         | Wong               |
| 18:00-19:00  | Seminars/Exercises                              |                   |                         |                    |                  |                    |

2<sup>nd</sup> week (Conference Hall of the Veksler-Baldin Laboratory for High Energy Physics; see also “Strangeness in Quark Matter 2015” at <http://sqm.jinr.ru>)

| Time/Date    | Monday<br>06.07.      | Tuesday<br>07.07.            | Wednesday<br>08.07. | Thursday<br>09.07.   | Friday<br>10.07.              | Saturday<br>11.07. |
|--------------|-----------------------|------------------------------|---------------------|----------------------|-------------------------------|--------------------|
| 9:30-11:00   | Plenary Talks         |                              |                     |                      |                               |                    |
| Coffee Break |                       |                              |                     |                      |                               |                    |
| 11:30-13:00  | Plenary Talks         |                              |                     |                      |                               |                    |
|              | Lunch Break           |                              | Excursion           | Lunch Break          |                               | Closing            |
| 14:30-15:30  | Ohnishi               | Plenary Talks                |                     | Kaczmarek            | Aichelin                      |                    |
| 15:40-16:40  | Plenary Talks         | Parallel Talks               |                     | Parallel Talks       |                               |                    |
|              | Coffee Break          |                              |                     | Coffee Break         |                               |                    |
| 17:00-18:20  | Plenary Talks         | Parallel Talks               |                     | Parallel Talks       |                               |                    |
| 18:30-19:30  | NICA Lab<br>Excursion | Advisory<br>Board<br>Meeting |                     | Panel<br>Discussion  | Poster<br>Wine<br>&<br>Cheese |                    |
| 19:30- ...   | Welcome<br>Reception  |                              |                     | Conference<br>Dinner |                               |                    |

## Welcome Address and Opening:

**Victor A. Matveev** (Director, JINR Dubna):

Presentation of the Joint Institute for Nuclear Research

## Lecturers and Themes:

**Joerg Aichelin** (Nantes, France):

Modeling the hadronization processes in HIC

**Francesco Becattini** (Florence, Italy):

Hadron production, chemistry and freeze-out

**Marcus Bleicher** (Frankfurt, Germany):

Simulations of HIC with QCD Phase Transitions

**Elena Bratkovskaya** (Frankfurt, Germany):

Microscopic dynamical models for heavy ion collisions

**Larissa Bravina** (Oslo, Norway):

Monte Carlo Quark Gluon String Model- predictions for continuous freeze-out, directed and elliptic flow comparison with hydro and UrQMD

**Paolo Castorina** (Catania, Italy):

Hadron production as Hawking-Unruh effect

**Jean Cleymans** (Cape Town, South Africa):

Thermal Models in High Energy Physics

**Matthias Hempel** (Basel, Switzerland):

Cluster and phase transition in supernova EoS

**Dieter Hoffmann** (Darmstadt, Germany):

High energy density physics at FAIR

**Olaf Kaczmarek** (Bielefeld, Germany):

Lattice QCD simulations of correlations and deconfinement

**Burkhard Kämpfer** (Dresden-Rossendorf, Germany):

Particle production in high-intensity lasers

**Matthias Kaminski** (Alabama University, USA):

Holographic models for QCD at high densities

**Evgeny Kolomeitsev** (Banska Bystrica, Slovakia):

Neutrino processes in dense matter

**Akira Ohnishi** (Kyoto, Japan):

Approaches to QCD phase diagram; effective models, strong coupling lattice QCD, and compact stars

**Jørgen Randrup** (Berkeley, USA):

Spinodal enhancement at the QCD transition

**Cheuk-Yin Wong** (Oak Ridge, USA):

Exact solutions of Landau 1+1 dimensional hydrodynamics

## Seminars & Exercises:

|            | BLTP Hall | DIAS Hall    | Blokhintsev Hall |
|------------|-----------|--------------|------------------|
| Tuesday:   | Kaminski  | Castorina    | Ohnishi          |
| Wednesday: | Hoffmann  | Hempel       | Kaminski         |
| Thursday:  | Randrup   | Kolomeitsev  | Cleymans         |
| Friday:    | Bleicher  | Bratkovskaya | Kaempfer         |

<http://theor.jinr.ru/~diastp/dm15/>