

NICA White Paper Evaluation Sheet - Stage I

Surname, Name:

Institute:

Email:

Abstract

The present evaluation (stage I) concerns the NICA White Paper version 9.02 from June 7, 2013

<http://theor.jinr.ru/twiki-cgi/view/NICA/WebHome>

The scope is on the classification of observables suggested by the evaluated contributions into three classes (A, B, C) and which NICA experiment will be concerned.

Evaluation criteria

The contributions are evaluated according to the question whether they suggest observables to be measured in NICA experiments. If this is the case, they shall be classified in the following categories:

- A) **“Basic”**: precision measurements needed to improve understanding of already established phenomena. Here the success is granted providing the accelerator, detectors, ... will work properly,
- B) **“Discovery”**: measurements with the significant discovery potential, the word ”significant” refers to a consensus of a significant part of the community - here we hope for a success but it depends on actual today unknown properties of nature,
- C) **“Exotic”**: measurements which will test exotic ideas - if possible they will nicely complement the program motivated by A) and B) but they are not crucial.

The 4 boxes of multiple choice for NICA relevance stand for:

[0] = none

[1] = BM@N

[2] = MPD

[3] = SPD

Evaluation table for NICA WP v. 9.02 (June 7, 2013)

Title/Author	Category of observable	NICA relevance			
		[0]	[1]	[2]	[3]
2.1 MPD at the JINR NICA... (M. Gazdzicki)	A) Basic B) Discovery C) Exotic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.2 Comments on the Mixed Phase Physics (MPP) (Nu Xu)	A) Basic B) Discovery C) Exotic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.3 Experimental advantages of collider over fixed target (B. Mohanty)	A) Basic B) Discovery C) Exotic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.4 Observables and open problems for NICA (E. Bratkovskaya and W. Cassing)	A) Basic B) Discovery C) Exotic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.5 Exploring high-density baryonic matter... (J. Randrup and J. Cleymans)	A) Basic B) Discovery C) Exotic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.6 Nuclear matter physics at NICA (P. Senger)	A) Basic B) Discovery C) Exotic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.7 Hadron Physics at the Charm and Bottom Thresholds... (S. J. Brodsky)	A) Basic B) Discovery C) Exotic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.8 Excluded volume effects on baryon density... (V. V. Begun, M. Gazdzicki, M. I. Gorenstein)	A) Basic B) Discovery C) Exotic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2.9 Studying the Interplay of Strong and Electromagnetic Forces in Heavy Ion Collisions with NICA A. Rybicki et al.	A) Basic B) Discovery C) Exotic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3.1 Comments on a phase diagram and fluctuations M. Stephanov	A) Basic B) Discovery C) Exotic	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.2 Search for manifestation of medium effects in dense excited hadron-quark matter D. Voskresensky	A) Basic B) Discovery C) Exotic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.3 Searching for evidence of spinodal decomposition J. Randrup	A) Basic B) Discovery C) Exotic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.4 Supercooled quark-gluon phase? Yu. Ivanov	A) Basic B) Discovery C) Exotic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.5 Rigorous investigation of surface tension and finite width of the QGP bags at NICA energies K. Bugaev	A) Basic B) Discovery C) Exotic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Title/Author	Category of observable	NICA relevance
3.6 Isospin Effects on phase transitions of hadronic to quark matter M. Di Toro et al.	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
3.7 Accessibility of dense QCD phases in heavy-ion collisions D. Blaschke et al.	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
3.8 Transitional change to baryon-rich QCD matter at NICA energy K. Fukushima	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
3.9 Triple point and quarkyonic matter in the QCD phase diagram L. McLerran, K. Redlich and D. Blaschke	A) Basic B) Discovery C) Exotic	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
3.10 Search for the QCD Critical Point at NICA X. Luo, B. Mohanty, H.G. Ritter and N. Xu	A) Basic B) Discovery C) Exotic	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
3.11 Probing the hadron-quark mixed phase at finite temperature, baryon and isospin chemical potentials G.Y. Shao, M. Di Toro et al.	A) Basic B) Discovery C) Exotic	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
3.12 Physics of high baryon densities at NICA A. Tawfik	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
3.13 Lattice QCD constrained CEP prediction in nonlocal PNJL models G. A. Contrera, A. G. Grunfeld, D. Blaschke	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
3.14 From ultra-high densities towards NICA densities: color-flavor locking and other color superconductors A. Schmitt	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
3.15 Restoration of singlet axial symmetry at finite temperature and density S. Benic, D. Horvatic, D. Kekez, D. Klabucar	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
3.16 Search for the hot color superconducting phase and low-temperature critical point at NICA Zh. Zhang, T. Kunihiro	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
4.1 Hadronic signals of non-equilibrium phase transition B. Tomášik	A) Basic B) Discovery C) Exotic	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
4.2 Scalar mesons properties at finite temperature and density at NICA energy P. Costa and Yu.L. Kalinovsky	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
4.3 Hadron abundances at high baryon density H. Satz	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
4.4 Directed flow as a signal of a liquid state of transient matter S. M. Troshin	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
4.5 Importance of third moments of conserved charges in relativistic heavy ion collisions M. Asakawa	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
4.6 Baryon Stopping in Heavy-Ion Collisions Yu. B. Ivanov	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
4.7 Statistical hadronization phenomenology in a low-energy collider G. Torrieri	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

Title/Author	Category of observable	NICA relevance
4.8 Flow scaling in a low energy collider: When does the perfect fluid turn on? G. Torrieri	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
4.9 Dissipative hydrodynamics effects at NICA L. Turko	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
4.10 Hadronic Fluctuations, freeze-out conditions and the QCD (phase) transition line F. Karsch and C. Schmidt	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
4.11 Exploring hybrid star matter at NICA T. Klähn, D. Blaschke, F. Weber	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
4.12 Testing Hadron Formation and Exotic Bound States in Heavy Ion Collisions at NICA R. Bellwied, C. Markert	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
4.13 Understanding the properties of chemical freeze-out C. Blume	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
4.14 Dynamical development of statistical parameters in phase transition L.P. Csernai et al.	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
4.15 Challenges to hydrodynamics at NICA P. Huovinen	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
4.16 Importance of clusters for flow measurements at NICA P. Danielewicz, T. Klähn, W. Reisdorf, D. Blaschke	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
4.17 Baryon stopping probes deconfinement G. Wolschin	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
4.18 Can NICA verify BES? D. Parganlija	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
4.19 Spinodal amplification of density fluctuations in nuclear collisions at NICA J. Steinheimer and J. Randrup	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
4.20 Phenomena at the QCD phase transition in nonequilibrium chiral fluid dynamics (N_χ FD) M. Nahrgang et al.	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
4.21 Recent Developments of the Hadron Resonance Gas Model and the Chemical Freeze-out of Strange Hadrons K. A. Bugaev et al.	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
4.22 Phase transition signatures in hydrodynamic simulations of heavy-ion collisions at NICA - FAIR energies A.V. Merdeev, L.M. Satarov, I.N. Mishustin	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
5.1 Femtosopic search for the 1-st order phase transition R. Lednicky	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
5.2 Brief arguments for studying azimuthally sensitive HBT M. Lisa	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
5.3 Physics at NICA-MPD: particle correlations V. A. Okorokov	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
5.4 Event-by-event fluctuations in nucleus-nucleus collisions M. Gorenstein	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

Title/Author	Category of observable	NICA relevance
5.5 Flow and freeze-out in relativistic heavy-ion collisions at NICA L. Bravina and E. Zabrodin	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
5.6 Perspectives of anisotropic flow measurements at NICA V. Korotkikh et al.	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
5.7 Fluctuations and non-equilibrium processes in collective flow T. Kodama	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
5.8 The prospects for experimental study of directed, elliptic, and triangular flows ... M. Bleicher et al.	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
5.9 Baryon number cumulants in relativistic heavy ion collisions. M. Kitazawa, M. Asakawa	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
5.10 Thermal Conductivity and Chiral Critical Point in Third Generation Heavy Ion Collision Experiments J. I. Kapusta, J. M. Torres-Rincon	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
6.1 My several thoughts on NICA E. Levin	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
6.2 Some issues in NICA-related research at LPI I. Dremin and A. Leonidov	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
6.3 Hydrokinetic analysis of space-time evolution and properties of strongly interacting matter... Yu. Sinyukov	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
6.4 Open and hidden strangeness production E. Kolomeitsev and B. Tomasik	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
6.5 Chemical freeze-out and strangeness production study at NICA . F. Becattini	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
6.6 MEMO production at high baryon densities M. Bleicher, J. Steinheimer	A) Basic B) Discovery C) Exotic	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
6.7 Statistical production of antikaon nuclear bound states at NICA . A. Andronic et al.	A) Basic B) Discovery C) Exotic	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
6.8 Stochastic Hadron Production H. Satz	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
6.9 Enhanced strangeness in proton and hard pp collisions. G.I. Lykasov, A.A. Grinyuk, I.V. Bednyakov	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
7.1 Low-mass dileptons at NICA I. Tserruya	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
7.2 Dileptons at NICA K. Gudima and V. Toneev	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
7.3 Electromagnetic probes on NICA Kh. Abraamyan and A. Friesen	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
7.4 Solving the problem of anomalous J/ Ψ suppression at NICA MPD. A.B.Kurepin and N.S.Topilskaya	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

Title/Author	Category of observable	NICA relevance
7.5 Low energy J/Ψ -hadron interactions H. Satz	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
7.6 J/Ψ production in high energy nuclear collisions P. Zhuang	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
7.7 Soft photons at NICA V. V. Avdeichikov et al.	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
7.8 Electromagnetic probes in heavy-ion collisions H. van Hees	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
7.9 Dilepton and ϕ meson production in elementary and nuclear collisions at the NICA fixed target experiment M. Zetyenyi, G. Wolf	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
8.1 Topologically induced local P and CP violation in hot QCD matter. D. Kharzeev	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
8.2 Magnetic effects in QCD vacuum: lattice view P.V. Buividovich et al.	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
8.3 Rich physics of non-central heavy-ion collisions S. Voloshin	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
8.4 Spontaneous P-violation in dense matter accessible with NICA A. Andrianov, V. Andrianov and D. Espriu	A) Basic B) Discovery C) Exotic	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
8.5 On CP violation in heavy-ion collisions at the NICA energy V. Skokov and V. Toneev	A) Basic B) Discovery C) Exotic	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
8.6 Vorticity and neutron asymmetries at NICA M. Baznat et al.	A) Basic B) Discovery C) Exotic	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
8.7 Particle correlations and local P-violation in heavy-ion collisions V. Koch, A. Bzdak, J. Liao	A) Basic B) Discovery C) Exotic	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
8.8 Exploring Dense and Cold QCD Phases in a Magnetic Field V. de la Incera, E. J. Ferrer	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
9.1 New forms of QCD matter and cumulative processes A. Kaidalov	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
9.2 The study of dense cold nuclear matter with cumulative trigger A. Stavinskiy et al	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
9.3 Quark cluster structures in hypernuclei and compressed nuclear matter at NICA and FAIR H. J. Pirner, J. P. Vary	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
10.1 Polarization effects in heavy ions collisions at NICA A. Efremov, O. Teryaev and V. Toneev	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
10.2 Spin physics A. Efremov et al.	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

Title/Author	Category of observable	NICA relevance
10.3 Polarization of Λ^0 hyperons in nucleus-nucleus collisions at MPD V. Ladygin, A. Jerusalemov and N. Ladygina	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
10.4 Possible effect of mixed phase and deconfinement upon spin correlations ... V.L. Lyuboshitz and V.V. Lyuboshitz	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
11.1 Determination of the equation of state of dense matter S. Fantonia et al.	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
11.2 Relativistic nuclear fusion reactions and QED of strong fields: novel possibilities at the NICA facility A. Kovalenko, A. Sissakian and A. Sorin	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
11.3 Development of highly charged ion sources for NICA injector and its possible applications for nanofabrication and in medicine. D.E. Donets et al.	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
11.4 Using Specific Nuclei for NICA Experiments P. Filip	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
11.5 Inputs for viscous Cosmology from NICA experiments A. Tawfik	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
12.1 Measurement of Elementary Cross Sections J. Aichelin, M. Bleicher, E. Bratkovskaya, C. Hartnack	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
12.2 Search for scaling onset in exclusive reactions with lightest nuclei at NUCLOTRON using fixed target. Yu.N. Uzikov	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
12.3 Measurement of strange particle production in the NICA fixed-target program V. Friese	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
12.4 Fixed target mode: correlations in relative 4-velocity space V.A. Okorokov	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
12.5 Nuclear and strange matter physics with a fixed-target experiment at the JINR-Nuclotron P. Senger	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
12.6 Deeply Subthreshold Particle Production in Nucleus-Nucleus Collisions S. Mrowczynski	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
12.7 Production of exotic hypernuclei and hyper-matter A. S. Botvina	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
12.8 Light Hyper-Fragments Production in Au+Au central collisions at 4AGeV. Model predictions. K. K. Gudima	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
12.9 Hypernuclei Production in Heavy Ion Collisions A. LeFevre, Ch. Hartnack, Y. Leifels, J. Aichelin	A) Basic B) Discovery C) Exotic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>