Form 24

Studies of Baryonic Matter at the Nuclotron (BM@N)

Addendum to the project

 "Probing Short-Range-Correlations" (SRC @ BMN)

for 2017-2021

 Theme 02-0-1065-2007/2019

 Development of the JINR Basic Facility for Generation of Intense Heavy Ion and Polarized Nuclear Beams Aimed at Searching for the Mixed Phase of Nuclear Matter and Investigation of Polarization Phenomena at the Collision Energies up to √s = 11 GeV/n

**List of organizations and participants**

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Massachusetts Institute of Technology

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**Israel**

Tel Aviv University

E. Piasetzky, E. Cohen

Project leaders: M.N.Kapishin (JINR)

 E. Piasetzky (Tel Aviv University)

Deputies: O. Hen (Massachusetts Institute of Technology)

 T. Aumann (Technische Universität Darmstadt)

DATA OF SUBMITION OF THE PROJECT TO SO & IC OFFICE \_\_\_\_\_\_\_\_\_

DATA OF THE LABORATORY STC DOCUMENT NUMBER \_\_\_\_\_\_\_\_\_

DATA OF PRESENTATION OF PHYSICS MOTIVATION – 31.03.2017, Round

Table at the Workshop on «Study of high density nuclear matter with hadron beams», Weizmann Institute of Science, Rehovot

Form 26

Studies of Baryonic Matter at the Nuclotron (BM@N)

Time schedule and requested resources for the realization of the

Addendum to the project "Probing Short-Range-Correlations" (SRC @ BMN)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Detectors / subsystems / facilities** | **Cost of components, kUSD / required resources** | **2017** | **2018** | **2019** | **2020** | **2021** |
| **Infrastructure of experimental zone** | **50** | **10** | **10** | **10** | **10** | **10** |
| **Mechanics, frame for neutron detector (NeuLand)** | **20** | **20** | - | - | - | **-** |
| **Trigger, target area detectors** | **60** | **20** | **10** | **10** | **10** | **10** |
| **DAQ upgrade** | **50** | **10** | **10** | **10** | **10** | **10** |
| **Nuclotron, hours** | **2800** | **400** | **-** | **800** | **800** | **800** |
| **Labor OP, hours** | **550** | **200** | **100** | **100** | **100** | **50** |
| **Labor KB, hours** | **400** | **200** | **50** | **50** | **50** | **50** |

 Project leader: M.N.Kapishin

Form 29

Studies of Baryonic Matter at the Nuclotron (BM@N)

Estimate of expenditures on the

Addendum to the project "Probing Short-Range-Correlations" (SRC @ BMN)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Designation of the articles of the straight expenditures | Total cost / resources | 1 year2017 | 2 year2018 | 3 year2019 | 4 year2020 | 5 year2021 |
| 1. Accelerator, hours | 2800 | 400 | - | 800 | 800 | 800 |
| 2. Laboratory OP, hours | 550 | 200 | 100 | 100 | 100 | 50 |
| 3. Laboratory KB, hours | 400 | 200 | 50 | 50 | 50 | 50 |
| 4. Equipment, materials, kUSD | 180 | 60 | 30 | 30 | 30 | 30 |
| 5.Traveling expenses, kUSD including: a) to the countries of the other currencies b) in the ruble zonec) by the protocols | 110752510 | 221552 | 221552 | 221552 | 221552 | 221552 |
| **Altogether according to the straight expenditures, kUSD** | **290** | **82** | **52** | **52** | **52** | **52** |

Project leader: M.N.Kapishin

 Director of the laboratory: V.D.Kekelidze

 Chief engeneer-economist of the laboratory: G.G.Volkova

Form 25

Sheet of the Project Approvals

Studies of Baryonic Matter at the Nuclotron (BM@N)

Addendum to the project "Probing Short-Range-Correlations" (SRC @ BMN)

for 2017-2021

 Theme 02-0-1065-2007/2019

 Theme leaders: V.D.Kekelidze, A.S.Sorin,

 Project leaders: M.N.Kapishin, E. Piasetzky

|  |  |  |
| --- | --- | --- |
| **Approved by the Director of JINR** | **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |  **«\_\_\_\_»\_\_\_\_\_\_\_\_\_\_\_2017**  |
| **Agreed:**  | (Signature) | (date) |
|  |  |  |
| **JINR Vice-Director** | **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  | **«\_\_\_\_»\_\_\_\_\_\_\_\_\_\_\_2017**  |
|  |  |  |
| **Chief Scientific Secretary** | **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | **«\_\_\_\_»\_\_\_\_\_\_\_\_\_\_\_2017**  |
|  |  |  |
|  |  |  |
| **JINR Chief Engineer** | **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  | **«\_\_\_\_»\_\_\_\_\_\_\_\_\_\_\_2017**  |
|  |  |  |
| **Head of SOD DEPARTMENT** | **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  | **«\_\_\_\_»\_\_\_\_\_\_\_\_\_\_\_2017**  |
|  |  |  |
| **LABORATORY DIRECTOR** | **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  | **«\_\_\_\_»\_\_\_\_\_\_\_\_\_\_\_2017**  |
|  |  |  |
| **LABORATORY Chief Engineer** | **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  | **«\_\_\_\_»\_\_\_\_\_\_\_\_\_\_\_2017**  |
|  |  |  |
| **PROJECT LEADERS** | **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | **«\_\_\_\_»\_\_\_\_\_\_\_\_\_\_\_2017**  |
|  |  |  |
|  | **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  | **«\_\_\_\_»\_\_\_\_\_\_\_\_\_\_\_2017**  |
| **APPROVED** |   |  |
|  |  |  |
| **PAC for Particle Physics** | **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | **«\_\_\_\_»\_\_\_\_\_\_\_\_\_\_\_2017**  |
|  |  |  |
|  |  |  |