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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Joint Institute for Nuclear Research – JINR (Dubna)

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**USA**

Massachusetts Institute of Technology

O. Hen, G. Laskaris, M. Patsyuk, E. Segarra

**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 year  2017 | 2 year  2018 | 3 year  2019 | 4 year  2020 | 5 year  2021 |
| 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 zone  c) by the protocols | 110  75  25  10 | 22  15  5  2 | 22  15  5  2 | 22  15  5  2 | 22  15  5  2 | 22  15  5  2 |
| **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** |
|  |  |  |
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