

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

Prologation for 2022-2026

Theme 02-0-1065-2007/2023

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Project leader: M.N.Kapishin (JINR)

Project deputy: A.I.Maksymchuk (JINR)

DATE OF SUBMISSION OF PROPOSAL OF PROJECT TO SOD _____

DATE OF THE LABORATORY STC _____

DOCUMENT NUMBER _____

STARTING DATE OF PROJECT _____

(FOR EXTENSION OF PROJECT — DATE OF ITS FIRST APPROVAL) _____

Estimated expenditures for the project:
Studies of Baryonic Matter at the Nuclotron (BM@N)

Expenditure items	Total cost / resources	1 year 2022	2 year 2023	3 year 2024	4 year 2025	5 year 2026
Direct project expenses						
1. Accelerator, hours	14000	2000	3000	3000	3000	3000
2. Computing (proc*hours) / mln	100	15	15	20	25	25
3. Laboratory workshop, hours	2600	600	600	600	400	400
4. Laboratory design buro, hours	1500	500	300	300	200	200
5. Equipment, materials, kUSD	2670	1250	430	350	330	310
6. Research carried out under contracts, kUSD	250	50	50	50	50	50
7. Traveling allowance, kUSD, including:	750	150	150	150	150	150
a) non-ruble zone countries	250	50	50	50	50	50
b) ruble zone countries	250	50	50	50	50	50
c) protocol-based	250	50	50	50	50	50
Total direct expenses, kUSD	3670	1450	630	550	530	510

Project leader:

M.N.Kapishin

Director of the laboratory:

V.D.Kekelidze

Chief engineer-economist of the laboratory:

G.G.Volkova

PROJECT ENDORSEMENT LIST

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

Prologation for 2022-2026

Theme 02-0-1065-2007/2023

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

Project leader: M.N.Kapishin

APPROVED BY JINR DIRECTOR	SIGNATURE	DATE
ENDORSED BY		
JINR VICE-DIRECTOR	SIGNATURE	DATE
CHIEF SCIENTIFIC SECRETARY	SIGNATURE	DATE
CHIEF ENGINEER	SIGNATURE	DATE
HEAD OF SCIENCE ORGANIZATION DEPARTMENT	SIGNATURE	DATE
LABORATORY DIRECTOR	SIGNATURE	DATE
LABORATORY CHIEF ENGINEER	SIGNATURE	DATE
PROJECT LEADER	SIGNATURE	DATE
PROJECT DEPUTY LEADER	SIGNATURE	DATE
ENDORSED		
RESPECTIVE PAC	SIGNATURE	DATE

Schedule proposal and resources required for the implementation of the Project

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

Expenditures, resources, financing sources		Costs (k\$) Resource requirements	Proposals of the Laboratory on the distribution of finances and resources					
			1 st year 2022	2 nd year 2023	3 rd year 2024	4 th year 2025	5 th year 2026	
Expenditures	GEM tracker	390	230	40	40	40	40	
	FwdSi tracker	610	450	40	40	40	40	
	STS tracker	390	150	60	60	60	60	
	CSC tracker	140	90	20	10	10	10	
	ToF system	50	10	10	10	10	10	
	FHCAL detectors	140	90	20	10	10	10	
	Detector prototypes	170	40	40	30	30	30	
	Trigger system	60	20	10	10	10	10	
	Exp zone infrastructure	270	70	50	50	50	50	
	DAQ system	700	150	190	140	120	100	
	Total	2920	1300	480	400	380	360	
Required resources	Standard hour	Laboratory design bureau;	1500	500	300	300	200	200
		Laboratory workshop;	2600	600	600	600	400	400
		Nuclotron Computing (proc*hours)/mln	14000 100	2000 15	3000 15	3000 20	3000 25	3000 25
Financing sources	Budgetary resources	Budget expenditures including foreign-currency resources.	2920	1300	480	400	380	360
	External resources	Contributions from collaborators (kEur): BMBF-JINR roadmap (equipment and personal)	5970 kEur	2795	1985	810	380	-

PROJECT LEADER

M.N.Kapishin