Towards JENNIFER3 startup

Oct 29th 2024

- Consortium composition and budget after Grant agreement
- Remind project structure
- WP coordinators and Council chair
- Kickoff meeting
- Common fund provisions
- Consortium Agreement preparation
- Logo and website

Consortium changes at Grant Agreement stage:

- As planned, King's College cannot be funded by EU but applies for the same grant to UK guarantee fund. To keep being inside JENNIFER3, becomes a third country partner, which hosts a 1 month secondment from INFN.

- Unfortunately Swiss institutions cannot be beneficiaries in the 2023 call and cannot be partners as they did not produce a committment letter for it. However they can enter as partners later, with an amendment: in this case they can host secondments both in Geneva and in Zurich. May be useful…..

- Uppsala University entered as new beneficiary to work in ML task for Belle II

- Oviedo and Sevilla become independent beneficiaries and not linked partners to IFAE (REA request)

New Consortium composition

Participant	WP1	WP2	WP3	WP4	WP5	WP6	WP7	Total Person-Months
1 - INFN	34.00	14.00	29.00	13.00	11.00			101.00
2 - DESY	38.00			7.00	6.00			51.00
3 - CNRS	15.00	4.00	3.00	9.00	1.00			32.00
4 - OEAW Vienna	9.00			3.00	2.00			14.00
5 - JSI Ljubliana	11.00			4.00	3.00			18.00
6 - CEA Saclay		7.00	5.00	1.00				13.00
7 - CU Prague	6.00							6.00
8 - IFJ PAN Cracow	9.00	1.00						10.00
9 - NCBJ Warsaw		6.00	10.00					16.00
10 - TAU Tel Aviv	3.00				1.00			4.00
11 - CAEN			1.00	1.00				2.00
12 - IFAE-CERCA Barcelona		4.00	3.00	1.00				8.00
13 - CSIC Valencia	3.00			1.00				4.00
14 - UU Uppsala					3.00			3.00
15 - USE Sevilla		4.00						4.00
16 - UNIOVI Oviedo			4.00					4.00
Total Person-Months	128.00	40.00	55.00	40.00	27.00	0.00	0.00	290.00

JENNIFER3 Activity Structure

WP	Title	Lead beneficiary	Person months	Proposed coordinator
WP1	Search for new phenomena in the Belle II data	OEAW	128	C. Schwanda
WP2	Near detectors for neutrino physics at T2K and Hyper-Kamiokande	CNRS	40	C. Giganti
WP3	Far detectors for neutrino physics at T2K and Hyper-Kamiokande	KCL (partner)	55	F. Di Lodovico
WP4	Advanced Particle detector technologies	INFN	40	C. Cecchi
WP5	Information Technology and machine learning applications	DESY	27	S. Lange
WP6	Outreach and Communication	JSI	0	R. Pestotnik
WP7	Management of the project	INFN	0	A. Passeri

JENNIFER3 Management Structure

Consortium Council : one representative per beneficiary (only INFN has 2, one Belle2 and one T2K).
It votes for its chairperson in its first meeting.
Meets at least one per year, monitor project evolution
Decides on actions to be taken and on Executive committee proposals

Executive Committee: the project coordinator, the 6 WP coordinators, the chair of the Council.
Chaired by the project coordinator
Meets regularly, monitor closely the activities and the secondment implementation
Manages common fund according to Council directives
Prepare all the project technical reports to be submited to EU

Role of WP coordinators and Coulci Chairperson is then a key one.

WP1: Search for new phenomena in the Belle II data

Tasks

Task 1.1 Detector performance assessment.
Task 1.2 Precision CKM tests and searches for non-SM CP violation
Task 1.3 Rare decays and test for lepton flavour non-universality
Task 1.4 Direct searches for light non-SM physics
Task 1.5 Quantum chromodynamics: Quarkonium, exotic and hadron spectroscopy

Deliverables

D1.1 – Belle II report on calibration and performances for collected data set - month 48
D1.2 – Public Belle II report on CKM tests and CP violation - month 48
D1.3 – Public Belle II report on LFU - month 48
D1.4 – Public Belle II report on dark sector searches - month 48
D1.5 – Public Belle II report on QCD measurements - month 48

WP2: Near detectors for neutrino physics at T2K and Hyper-Kamiokande

Tasks

Task 2.1: Characterization of the new detector technologies of the ND280 Upgrade.
Task 2.2: Definition of Hyper-K Near Detector strategy, including IWCD and ND280.
Task 2.3: Neutrino cross-section measurements.
Task 2.4 Near Detectors inputs to oscillation analyses.

Deliverables

D2.1 – Public report on upgraded ND280 performances - month 24
D2.2 – Report on the studie of ND280 and IWCD combination - month 36
D2.3 – Public report on neutrino cross section measurement using hadron kinematics - month 36
D2.4 – New T2K oscillation measurement - month 48

WP3: Far detectors for neutrino physics at T2K and Hyper-Kamiokande

Tasks

Task 3.1 High-precision WC calibration and characterization
Task 3.2 Underwater photodetection system
Task 3.3 Underwater electronics.
Task 3.4 CPV analysis.

Deliverables

D3.1 – Report on first Hyper-K calibration - month 48
D3.2 – Report on the operation of mPMT in Hyper-K - month 48
D3.3 – Report on the operation of underwater electronics - month 48
D3.4 – Report on analysis of firt Hyper-K data sample - month 48

WP4: Advanced Particle detector technologies

Tasks

Task 4.1 Monolithic silicon trackers
Task 4.2 Photodetection devices for particle detectors.
Task 4.3 Innovative detectors for particle beam monitoring
Task 4.4 Future neutrino imaging detectors

Deliverables

D4.1 – Report on prototype ladder with CMOS sensors - month 48
D4.2 – Joint report on photodetectors R&D - month 48
D4.3 – Report on luminometer and polarimeter design for SuperKEKB - month 48
D4.4 – Report on potentiality of imaging detectors for neutrino physics - month 36

WP5: Information Technology and machine learning applications

Tasks

Task 5.1 Worldwide distributed computing.
Task 5.2 Advanced network solutions.
Task 5.3 Machine learning for big data analysis
Tasl 5.4 Machine learning for real time applications

Deliverables

D5.1 – Workshop on cloud computing - month 24
D5.2 – Report on joint data challenge - month 36
D5.3 – Bi-annual workshop on ML for data analysis - month 24-48
D5.4 – Report on real time ML on FPGA - month 48

WP6: Outreach and Comunication

Tasks

Task 6.1 Masterclasses on flavour and neutrino physics.
Task 6.2 General public particle physics communication with visual tools
Task 6.3 Support to KEK Summer School.
Task 6.4 Joint European-Japanese PhD supervision

Deliverables

D6.1 – MAsterclasses questionnaire analysis - month 48
D6.2 – Virtual reality portable tools - month 48
D6.3 – Co-Organization of KEK Summer school - month 48
D6.4 – Award to best co-supervised thesis - month 48
D6.5 – Communication, Dissemination and Exploitation Plan - month 6

WP7: Management of the project

Tasks

Manage secondments and their accounting
Coordinate communication and decision making among beneficiaries and partners
Manage risks which can delay or stop the project activities.

Deliverables

D7.1 – Progress report - month 13-37
D7.2 – Mid-term meeting - month 16
D7.3 – Data Management Plan - month 6

Milestones

Project website first version - month 3
Election of Consortium Council Chair - month 6
Kickoff meeting - month 1

IFAE is available to organize kickoff meeting in Barcelona in january.
Will make a URGENT poll for the dates. Any vetoes? Overlaps?

Common Fund

In JENNIFER2 it was 7% of the budget from each beneficiary. As JENNIFER3 has lower budget, we may decide to keep it lower, provided we accomplish our deliverables:

In JENNIFER2, to help smaller groups to join common events we cover from CF the travels to project meetings and task workshops. To reduce CF we may decide now that in J3 each beneficiary pays for its people's travels to project meetings and events (but obviously this will reduce participation of smaller groups).

what	estimated cost	cost w/out travels	notes
Support to KEK-SSP	20.000,00 €	20.000,00 €	5K every year or 10K every 2 years
2 project meetrings in Europe	50.000,00 €	10.000,00 €	
2 project meeting in Japan	4.000,00 €	4.000,00 €	travel with secondment
workshop cloud computing	5.000,00 €	1.000,00 €	
2 workshop on ML in data analysis	10.000,00 €	2.000,00 €	attach them to J2GM
award to co-supervised thesis	2.000,00 €	2.000,00 €	
Website	5.000,00 €	5.000,00 €	
Total	**96.000,00 €**	**44.000,00 €**	
Full project budget	1.334.000,00 €	1.334.000,00 €	
Fraction	**7,2%**	**3,3%**	

Let’s remind budget definition for Staff Exchange projects:

For each secondment month we get 4600 € :

- Category A funds: 2300 €. They must be used for travel, accommodation and subsistence costs related to the secondment or as salary top-up of the seconded staff member.
- Category B1 funds: 1300 €. Addressed to costs for training, transfer of knowledge and networking activities, as well as research ones. Usually it is allowed to use it also for the secondment costs.
- Category B2 funds: 1000 €. Management and indirect costs. A kind of overhead that can be used in any way.

In case of audit only costs of category A are required to be proved by internal budget documentation.
Usage of management funds can be agreed in each administration.

Consortium Agreement and logo

Will basically clone the JENNIFER2 CA . In principle only change would be the CF quota.
I will circulate it : please ask your legal experts whether it can be signed by your institution.

Would you like to keep the JENNIFER2 logo by just updating the exponentiation to 3, or should we make some creative change?