

WPs

Table 1: List of Work Packages

WP	Title	Beneficiary/ Participant	Start month	End month
1	New particles search	ECOLE POLIBA AINSHAM	4	44
2	Detector development	POLIBA HELWAN	4	44
3	GRID computer application	POLIBA ECOLE CAIRO	4	44
4	Coordination, dissemination and training	HELWAN ECOLE POLIBA CAIRO AINSHAM	1	48

WP1

Deliverables

D 1.1: Mass spectrum of ZZ^* decaying into four leptons

Statistical significance of the discovery/exclusion of the Higgs in the mass range 120-160 GeV/c^2 will be obtained. Precise estimation of the backgrounds by simulation and using data is necessary.

D 1.2: Mass spectrum of electron pairs at high mass (above the Z)

Statistical significance of the discovery/exclusion of new bosons in the highest reachable mass range will be evaluated. A precise estimation of the background is needed.

D 1.3: CMS center for data analysis operational in Egypt

Set the software infrastructures and establish expertises for the running independent advances CMS analysis in Egypt.

Secondments

POLIBA: ER1 to AINSHAM for Task 1.3, delivering D 1.3 at month 44

ECOLE: ER2 to AINSHAM for Task 1.3, delivering D 1.3 at month 44

AINSHAM: ESR1 to ECOLE for Task 1.1, delivering D 1.1 at month 16

AINSHAM: ESR2 to POLIBA for Task 1.1, delivering D 1.1 at month 16

AINSHAM: ESR3 to ECOLE for Task 1.2, delivering D 1.2 at month 36

AINSHAM: ESR4 to POLIBA for Task 1.2, delivering D 1.2 at month 36

WP2

Deliverables

D 2.1: Assembly and test of MRPC/GEM detectors

This deliver foresees the assembly and beam-test measurements of large size MRPC/GEM prototypes to be proposed for the future detectors upgrade at CERN. The study of the detector performance in an LHC similar background environment will be pursued and completed.

D 2.2: Characterization of high radiation tolerant silicon detectors

This delivery should foresee the passive characterization and the beam-test measurements of new radiation tolerant silicon detector prototypes. The study of the detector performance in an LHC similar background environment will be pursued and completed.

D 2.3: Detector laboratory infrastructure at Helwan

This delivery foresees the completion of a gas-detector laboratory infrastructure in Egypt for the study of gaseous detectors. Also the training of proper personnel for the running of the laboratory will be achieved.

Secondments

POLIBA: ER3 to HELWAN for Task 2.3, delivering D 2.3 at month 44

POLIBA: TECH1 to HELWAN for Task 2.3, delivering D 2.3 at month 44

HELWAN: ESR5 to POLIBA for Task 2.1, delivering D 2.1 at month 15

HELWAN: ESR6 to POLIBA for Task 2.1, delivering D 2.1 at month 15

HELWAN: ESR7 to POLIBA for Task 2.2, delivering D 2.2 at month 35

HELWAN: ESR8 to POLIBA for Task 2.2, delivering D 2.2 at month 35

WP3

Deliverables

D 3.1: Transfer advanced GRID concepts and technologies to Egyptian researchers

Train young Egyptian researchers to improve their GRID knowledge and set up basic infrastructure

D 3.2: Release of a production level GRID job monitoring system and data access system

The final version of the monitoring system will be implemented and released. The data management and access system will be finalized and in production.

D 3.3: Egyptian Sites in production

All the Egyptian sites will have GRID infrastructure ready for the use by CMS end users.

Secondments

POLIBA: TECH2 to CAIRO for Task 3.3, delivering D 3.3 at month 44

ECOLE: ER4 to CAIRO for Task 3.3, delivering D 3.3 at month 44

CAIRO: ESR9 to ECOLE for Task 3.1, delivering D 3.1 at month 12

CAIRO: ESR10 to POLIBA for Task 3.1, delivering D 3.1 at month 12

CAIRO: ESR11 to POLIBA for Task 3.2, delivering D 3.2 at month 36

CAIRO: ESR12 to ECOLE for Task 3.2, delivering D 3.2 at month 36

WP4

Deliverables

D 4.1: Collaboration meetings

A kick-off meeting, intermediate collaboration meetings and a final concluding conference will be organized.

D 4.2: Academic lectures and specialized courses

Series of academic lectures in Egyptian universities will be scheduled. A school on “High Energy Physics and related technologies” subdivided in three editions along the project period will be organized.

D 4.3: Publications and conference reports

The production and submission to international journal of the results will be finalized, as well as submission to international conferences and preparation of reports.

Secondments

POLIBA: MANAG2 to HELWAN for Task 4.1, delivering D 4.1 at months 30, 44, 48

POLIBA: ER7 to CAIRO for Task 4.2/4.3, delivering D 4.1/4.2 at months 4, 16, 24,30, 44, 48

ECOLE: ER8 to CAIRO for Task 4.2/4.3, delivering D 4.1/4.2 at months 4, 16, 24,30, 44, 48

ECOLE: MANAG3 to AINSHAM for Task 4.1, delivering D 4.1 at months 4, 16, 24

HELWAN: ER6 to POLIBA for Task 4.1/4.2, delivering D 4.1/4.2 at months 6, 12, 21, 27, 36, 42

CAIRO: ER5 to ECOLE for Task 4.1/4.2, delivering D 4.1/4.2 at months 12, 21, 36, 42

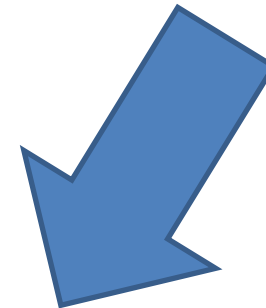
Secondments totals

WP	EU to EG	EG to EU
WP1	12 months	28 months
WP2	12 months	37 months
WP3	12 months	24 months
WP4	18 months	12 months
Total WPs	54 months	101 months

By agreement in the PA, 15% was put apart for the management

155 -----> 132

WP	EU to EG	EG to EU
WP1	8 months	26 months
WP2	8 months	35 months
WP3	8 months	22 months
WP4	14 months	12 months
Total WPs	38 months	94 months



Milestones

Milestone n°.	Milestone name	WPs n°.	Lead Beneficiary/organisation short name	Delivery date	Comments
1	Completion of training phase for GRID technologies	3	BARI	Month #12	End of training of the site administrator involved into the project
2	First small size MRPC and GEM prototypes validated	2	BARI	Month #15	Study performance with cosmic rays of first small size MRPC and GEM prototypes
3	Sensitivity results for SM Higgs decaying into four leptons	1	POLIBA	Month #16	Comparison data and MC; discovery potential or exclusion limits for the Higgs search
4	First "High Energy Physics School" in Egvpt"	4	CAIRO	Month #16	Organisation of the first school in Egypt to disseminate knowledge

Meetings

Table 5: collaboration and review meetings

Name	Host partner	Schedule	Comment
Kick- off meeting	EGYPT	Month 4	Set up the collaboration strategies for the research activities
1° Consolidation meeting	POLIBA	Month 12	Monitor the network effectiveness and review research start-up
“Middle Term” workshop and status report	EGYPT	Month 24	“Middle Term” workshop for extensive review of the network activities and preparation of a status report document
2° Consolidation meeting	ECOLE	Month 36	Review of the network activities and results. Review of the milestones achievements
Conference and concluding collaboration meeting	EGYPT	Month 48	General conference to disseminate results and concluding meeting