

IJCLAB

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ATLAS France CAF-user meeting
28th November 2024

Composition of the team

→ *short description of the team + list of analyses*

→ **team:** no EC - 11 CNRS permanent 5 emeritus - 4 postdoc – 9 PhD

- ~25 IT (9 FTE) on (Calo, ITK, HGTD) upgrade
- xx IT (0.3 FTE) on grid

→ **analyses & perf. studies:**

- Higgs and di-Higgs Run 2
 - bbgammagamma
 - bbtatau
- VBS Run 2 (-> 3)
- SM for Run 3
- e/gamma
- Jets

S&C Institutional Commitments

→ We had an institutional commitment on Event Index (initially 2 persons, 1FTE) now the task in maintenance form (~0.1FTE) and Grigory has moved to core software (persistency with RNTuple for HL-LHC)

Involvement of the team in computing

- DAST shifts
- T2 operations
- (non purely ATLAS) LCG-France

Involvement of the team in software

- Event Index now in maintenance mode
- Persistency with RNTuple
- EDM
- Large ACTS effort but small fraction appear as ATLAS OTP

Pledged and unpledged Tier 2 grid resources (2024)

– **INSIDE GRIF**

Other local (lab, university) resources

- local storage : 26TB
- local computing : only one recent machine (wanted to buy more but not enough funds)
- Cloud : no (except resources for ITk DB)
- GPU : use Paris-Saclay mesocentre
- High Performance Computing : no

bbgammagamma

Use of CC-IN2P3

- Interactive: machine learning : XGBoost, Keras
- Batch: HyperParameter Optimisation
- /sps: 4TB
- Remarks:
 - Long time to recover for el9 change on jupyter platform
 - Slow interactive machines, have to hop to different login nodes to find one not-too loaded

bbtautau

(work with CPPM)

Use CC-IN2P3 batch to process hdf5 files as inputs for training

Use Paris-Saclay mesocentre for training on GPU

~ 1.3 TB on /sps

VBS

Use local server

*e/gamma calib probably used
/sps at CC but no detail found*

ACTS

Large scale compilation (40 core) @ CC

ML

Use V100 GPU @ CC

Activities of the team

fewer permanent people -> reduced number of physic topics

Resources and needs

- cloud@IJCLab : used for ITk localDB has shown single point of failure when flood in Orsay ==> Need a mirror of the infra., at CC-IN2P3 ?
- Local resources : want to buy an analysis oriented (local SSD) server but unlikely to have enough funds
- No major new demands at CC-IN2P3

AOB

Information taken from [OTP report](#)

Software involvement = **1.1** FTE (S&C+AS Activity = FTE)

(Core=**0.6**, Upgrade=**0.2**, Data/Detector=0, Ana/Reco=0.30)

Numbers updated for meeting, x2 if only 1st semester filled

Core: 0.40 FTE (Core=0.60) [S&C+AS=]

Name	OTP	Activity	System	Task	FTE
G. Rybkin	C3	Computing/Software	General Tasks	Core services: framework, geometry, EDM etc.	0.6
G. Rybkin	C3	Computing/Software	General Tasks	SPOT	0.02
D. Rousseau	C3	Computing/Software	General Tasks	GIT merge request review, Level 2	0.

Reconstruction/Analysis: 0.30 FTE (Reco/Ana=0.30) [S&C+AS=0.30]

Name	OTP	Activity	System	Task	FTE
A. Schaffer	C3	Computing/Software	General Tasks	Analysis Model Group	0.30

Other (ACTS etc ...) : 0. FTE allocated worth ~1 FTE + ~1.5 FTE ACTS non ATLAS)

Name	OTP	Activity	System	Task	FTE
C. Allaire		ACTS		ML for tracking	0
A. Maury		ACTS		ML for tracking	0
D. Rousseau		ACTS		ML for tracking	0

Information taken from [OTP report](#)

ADAM involvement = 0.10 FTE

Numbers updated for meeting, x2 if only 1st semester filled

ADAM: 0.20 FTE

Name	OTP	Activity	System	Task	FTE
G. Rybkin	C3	Computing/Software	General Tasks	TAG/EI and conditions/metadata database development	0.20

Information taken from [OTP report](#)

Total computing involvement ~ 1 FTE (0.23 C2, 0.05 C3, 0.30 C4, 0.40 Other)

Numbers updated for meeting, x2 if only 1st semester filled

Class 2 : 0.23 FTE

Name	OTP	Activity	System	Task	FTE
L. Duflot	C2	Computing/Software	General Tasks	Distributed Analysis Shifts 1st level	0.23

Class 3 : 0.05 FTE

Name	OTP	Activity	System	Task	FTE
L. Duflot	C3	Computing/Software	General Tasks	Cloud Operation & Management / cloud manag.	0.05

Class 4 : 0.30 FTE

Name	OTP	Activity	System	Task	FTE
Institute	C4	Computing/Software	General Tasks	FR GRIF, Orsay	0.30

Other : 0.40 FTE

Name	OTP	Activity	System	Task	FTE
L. Duflot		Computing/Software	General Tasks	WLCG/LCG-FR	0.40