IJCLAB

Laurent Duflot

ATLAS France CAF-PAF meeting
21st November 2023

Team

Composition of the team
 → *18 permanent (4 « émérites ») 3 post-docs 8 students ~ 25 ingeneers mostly on Upgrades + ~ 5 non ATLAS ACTS*

Involvement of the team in computing

Staff IE/IR : grid site administration
Staff physicist : shifts (DAST, git) LCG-France

Involvement of the team in software

Staff IE/IR : ACTS, Event Index
Staff physicist : ACTS/Athena, Core, EDM

→ *description of computing resources available for the team in the laboratory*

Grid : part of GRIF (one pledge, one LOCALGROUPDISK for IJCLAB, IRFU, LLR, LPNHE

Other local (lab, university) resources *(whatever is non grid)*
   - 26TB
   - 1 recent group server (~ grid worker node) 128 cores 512GB RAM, two old machines
   - high performance computing (HPC, GPU ….) : not for the group but could have access to mesocentre ressources (not use AFAIK)

Analysis and needs

Higgs, VBS, SM, searches, perf e/gamma, perf jet/Etmiss

Di-Higgs bbtautau List of analyses with local or CC-IN2P3 usage
→ statistical analysis on local resources

Di-Higgs bb gamma gamma
→ *analysis, 6.5TB @ CC-IN2P3*

Higgs ZZ
→ analyse ML on local resources

H 4l and PhysLite
→ *developments @ CC-IN2P3*

VBS
→ fits on local resources

MET performance
→ ntuple making, analysis, on local resources

HGTD
→ test beam analysis on local resources

ML
→ use local resources (~ 80 core 100GB RAM)
→ *as intern used V100 at CC, will probably be used again during thesis*

4

Activities of the team
→ *should be a new comer working on calorimeter simulation with ML (no details on ressources needed)*

Resources and needs
→ *probably buy another group server locally*

AOB
→ *evolution of the software involvment as Event Index needs less dev*

IJCLab software involvement

Information taken from *OTP report*
Software involvement = 1.32 FTE (S&C+AS Activity = 0.42 FTE)
(Core=0, Upgrade=0.90, Data/Detector=0, Ana/Reco=0.42)

Reconstruction/Analysis: 0.42 FTE (Reco/Ana=0.42) [S&C+AS=0.42]

Name	OTP	Activity	System	Task	FTE
N. Morange	C3	Computing/Software	General Tasks	Reconstruction	0.04
A. Schaffer	C3	Computing/Software	General Tasks	Analysis Model Group	0.30
D. Rousseau	C3	Computing/Software	General Tasks	GIT merge request review, Level 2	0.08

Other (ACTS etc ...) : 0.90 FTE

Name	OTP	Activity	System	Task	FTE
A. Maury		ACTS		ML for tracking	0.40
D. Rousseau		ACTS		ML for tracking	0.50

Non ATLAS ACTS : ~ 1.5 F TE

IJCLab ADAM involvement

Information taken from *OTP report*
ADAM involvement = 0.40 FTE

ADAM: 0.40 FTE

Name	OTP	Activity	System	Task	FTE
G. Rybkin	C3	Computing/Software	General Tasks	TAG/EI and conditions/metadata database development	0.40

IJCLab computing involvement

Information taken from *OTP report*
Total computing involvement = 1.00 FTE (0.25 C2, 0.05 C3, 0.30 C4, 0.40 Other)

Class 2 : 0.25 FTE

Name	OTP	Activity	System	Task	FTE
L. Duflot	C2	Computing/Software	General Tasks	Distributed Analysis Shifts 1st level	0.25

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