

Overview of activity

Non-exhaustive list

Status	Title	Contact person	Data set	Software	CADI
Published	Jet-by-jet gap events	Cristian	13 TeV	SMPJ (?)	SMP-19-006
Submitted	Multi-jet differential	Luis Ignacio	EOY16	DAS	SMP-21-006
CWR soon	Dijet cross sections Inclusive jets	Daniel John	EOY16 5 TeV	DAS (2D) & Karma (3D) SMPJ	SMP-21-008 SMP-21-009
With ARC	Jet mass in Z+jets ESV with charged particles $R_{\Delta\phi}$ & α_S Lund jet plane Exclusive 2-track	Ashley Suman Paris Cristian Ferenc	FR2 EOY FR2 UL EOY16 + UL17/18 FR2 UL 13 TeV	 DAS SMPJ	SMP-20-002 SMP-22-004 SMP-22-005 SMP-22-007 SMP-21-004
WG stage	n -subjettiness E3C/E2C Inclusive b jets Glueballs Gluon fractions Instantons / ESV in MB Jet charge observables MN jets Multi-jet ratios Single diffr. p+WZJ UL Inclusive jets Diffractive dijets Low- p_T trijets Energy correlators in jets High- p_T subjet analysis	Kaustuv Chenfeng & Meng Patrick Frici John Weijie Soumyadip Mats Argyro & Pol Martijn & Michael Valentina & Laura Cristian Al-Mashad Simon A. Criss, C. Tully	UL (not FR2?) UL16 EOY16 (?) low PU 8 & 13 TeV 13 TeV FR2 UL 13 TeV FR2 UL 2017H low PU Run 2 Run 2 low PU UL17 ?	 SMPJ (?) DAS SMPJ (?) DAS DAS SMPJ & DAS	SMP-22-003 SMP-22-015 SMP-17-007

Installation on naf

1. Setup naf: `source setup_naf.sh`

```
#!/bin/sh
module use -a /afs/desy.de/group/cms/modulefiles/
module load cmssw
ls -la /cvmfs/cms.cern.ch/
source /cvmfs/cms.cern.ch/cmsset_default.sh
```

language-bash

2 Install Darwin

```
https://gitlab.cern.ch/DasAnalysisSystem/Darwin.git
cd Darwin
source setup
make clean
make
```

(don't use `make -j`)

3. Use Core within Darwin

```
cd Darwin/CMSSW_12_4_0/src
cmenv
scram b -j `nproc`
```

4. make `Ntupliser/src` directory and put `RivetNtupliser.cc` and `BuildFile.xml` there and python config file.

5. Install Core: `source setup_DAS.sh` and build the `Rivet`

```
#!/bin/bash
cmsrel CMSSW_10_6_30
cd CMSSW_10_6_30/src
cmsenv
git clone https://gitlab.cern.ch/gparaske/Core.git
git checkout Rivet
scram b -j `nproc`
```

Running RivetNtuplizer

Running `cd Ntupliser && tree` displays all the different directories and files in each directory

```
tree
```