

ROOT News

Godparents' Meeting, Axel Naumann, 2019-07-03

Team Changes

- Danilo was asked to be detached to CMS for two years
- Guilherme got CERN LD starting October, only partially ROOT
- Two trainees, working on RNTuple and script reloading
- Plus lots of summer and GSoC students
 - Have promising applicant for GSoDocs

Team



Code-Owners

- See <https://root.cern/code-owners>
- Documenting main devs and their responsibilities
- Showing sustained contributions beyond “PR level”

Code-Owners

ROOT consists of several loosely coupled but consistently designed parts. The "code owners" of these parts are experts that review pull requests and guide these packages over a couple of years.

An up-to-date, detailed mapping of code versus owners can be found at <https://github.com/root-project/root/blob/master/.github/CODEOWNERS>. The long-term, coarse list can be found below:

Module	Code Owner
I/O	Philippe Canal (Fermilab)
• Compression	Oksana Shadura (Nebraska-Lincoln)
Math, Statistics, Machine Learning	Lorenzo Moneta (CERN)
• RooFit	Wouter Verkerke (NIKHEF), Stephan Hageboeck (CERN)
Graphics	Olivier Couet (CERN)
RDataFrame	Danilo Piparo (CERN), Enrico Guiraud (CERN)
Web-GUI, http Server	Sergey Linev (GSI), Bertrand Bellenot (CERN)
Event Display	Matevz Tadel (UCSI), Alja Mrak-Tadel (UCSI)

WebVR

- WebEve is now WebVR enabled, thanks to (ex-Mozilla) WebVR expert
- Handed 5CHF Google Cardboard clone to trainers (also works on iOS!)
- No special setup needed - all JSROOT geometry / WebEve examples offer it by default, automatically
- Basic interaction (picking) enabled
- More by next year's summer student?

ROOT @ SAP

- WebGUI uses OpenUI5, hosted by SAP
- ROOT team members participated at UI5Con
 - About 500 participants
- ROOT part of the UI5 keynote, on stage
 - <https://youtu.be/IPETbnuL9hs?t=386>

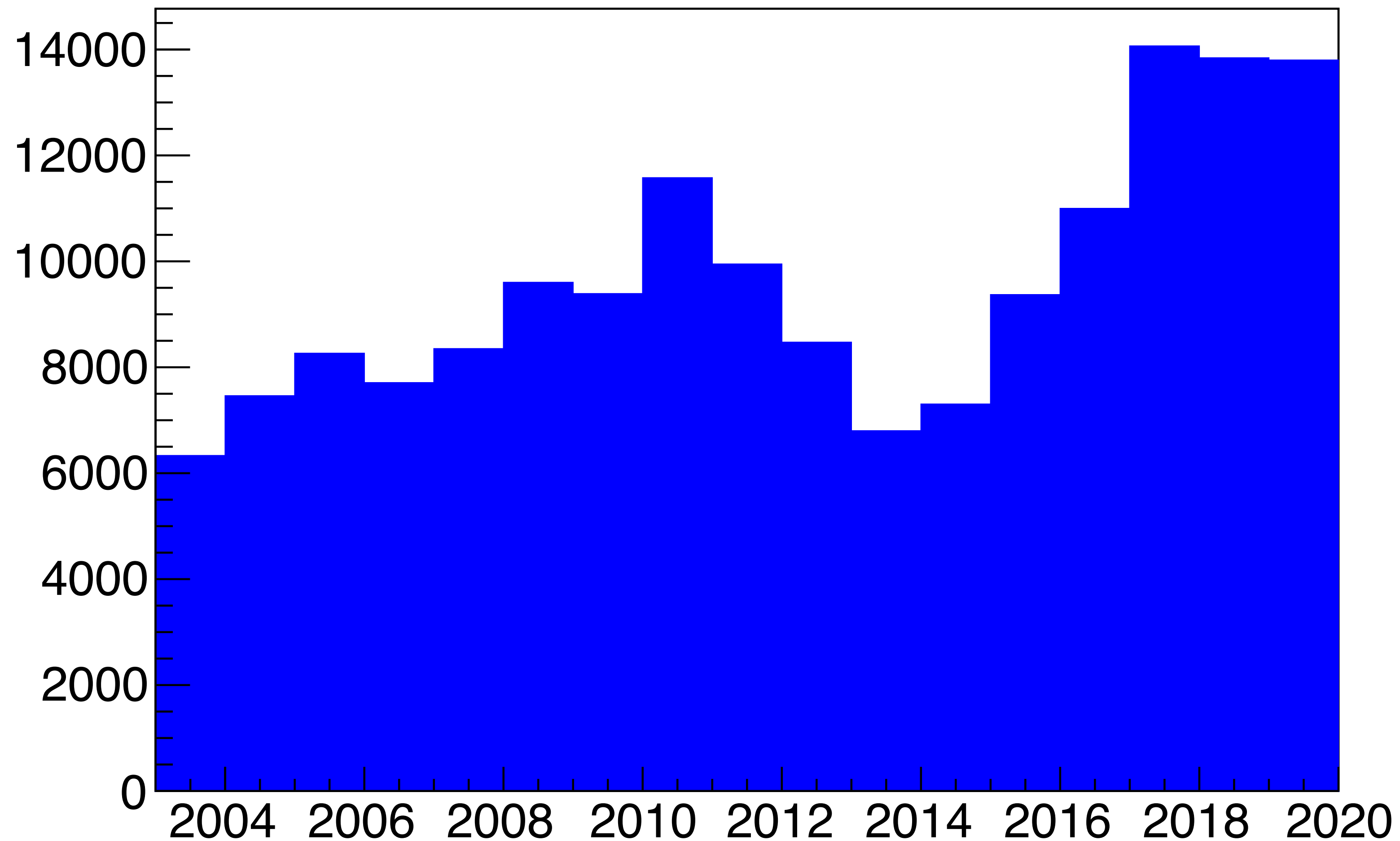
ROOT @ CHEP

- About 10 accepted oral presentations
- Again showing significance of our dev work for the community
- Maintenance alone doesn't have that impact...

Other News

ROOT Support Messages

- Using the occasion of the root-forum upgrade:
- (*2019 extrapolated)
- I.e. currently approx 40 posts/day!



ROOT v6.18

- New production release
 - One of two per year
- Focus on consolidation: bugs, speed, robustness
 - zlib-Cloudflare, RooFit iteration, GCC9, future macOS 10.15
- Several new features nonetheless, see announcement on ROOT homepage: RDataFrame::AsNumPy, Double32_t / Float16_t leaf, RooJohnsonPDF

RNTuple

- ROOT::**Experimental**::RNTuple, the future of TTree
- Type-safe, thread-sane, memory-centric, and fast
- Async raw reads, async decompression, async deserialization
 - Invest memory for less walltime, more parallelism
- Reduce code paths (cost: reduced feature set: TClonesArray etc)
- Goal: resilient, usable, max-throughput I/O for HEP data
- See [tutorials/v7/ntuple/](#)

Trainings

- ATLAS
- CMS ML Workshop
- Geneva Biotech School
- Three summer student introductions
- Much more interest, e.g. from companies