News

Danilo Piparo 6-1-2025









Forthcoming Deadlines and Events

- ► Jan 15: ROOT Deadline for Summer Student /OL/ GSoC Projects
 - Please enter them here . For OL students, please discuss with Danilo first.
 - Stretch-goals can be found here for inspiration
- ► Jan 15-25: Philippe at CERN
- ► Jan 20 (but the sooner the better) CHEP Proceedings
 - Please make sure your manuscript is reviewed by the proof-reading team (Giacomo, Lukas & Danilo) before submitting
- ► Jan 22: <u>SFT PoW Day</u>
- ► Mar 24-26: Idea2 Reserved for the 3rd ROOT Hackathon
 - ROOT 7-athon? Analysis-athon? Anything else?
- ► April: ROOT Contribution to the SFT Risk Register
 - Model circulated to SFT Project Leaders, we'll need to make some progress

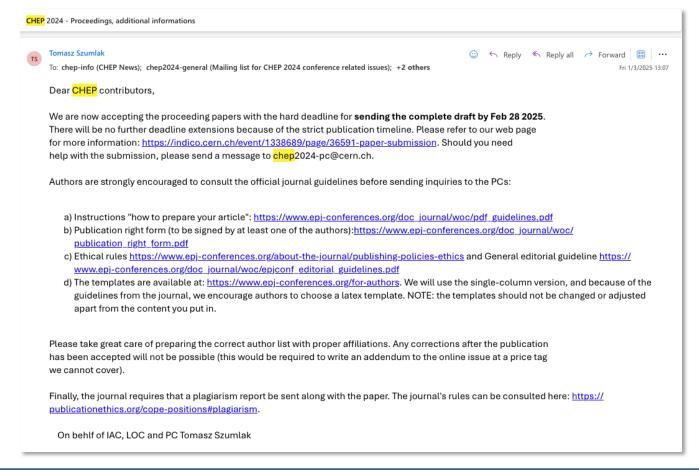


				Risk			
ID	Risk Summary	Risk Detail	Likelihood	Impact	Severity	Effect	Mitigation
Owner: EP-SF							
0.1							
Owner: ROO1	• '						
1.1							
Owner: Simul	ation						
2.1							
Owner: Cern\	/M						
3.1							
Owner: Stack	s						
4.1							
Owner: ML4E	P						
5.1							
Owner: Other							
6.1							
Legend							
Likelihood	1: never expected to happen						
	2: could happen but very unlikely						
	3: could well happen						
	4: will probably happen						
Impact	1: we can deal with it, no problem						
	2: a bit of a hassle but not too bad						
	3: can be managed, but significant effort						
	4: crisis						
Severity	Likelihood x Impact						

See <u>WLCG RR</u> for reference

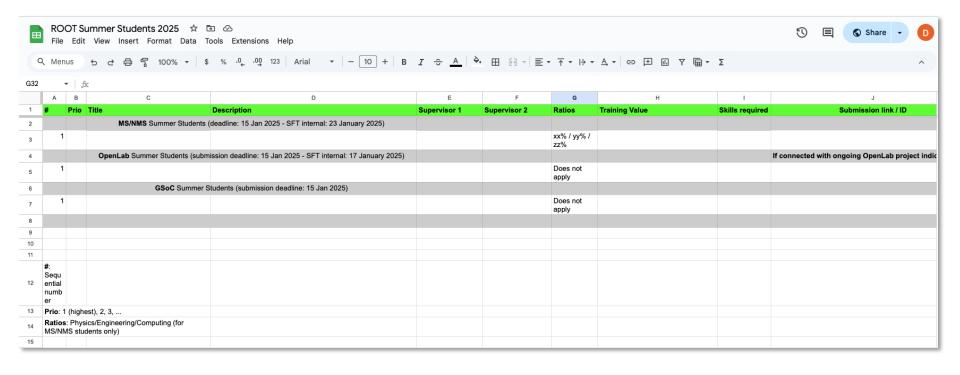


CHEP Proceedings Email





Students Sheet







2025 PoW Available (not announced)

DONE					
PARTIALLY DO	E CONTRACTOR CONTRACTO	₹	ᇹ		
NOT DONE		Priority	Compl.		
Builds	1 Make all 6.3X releases available on Conda (continuous)	1	0		
and	2 Upgrade the Windows CI to Windows 11 & Add MSVC preview builds in the CI	1	0		
Binaries	3 Move the ROOT doxy doc generation to the GitHub CI, including its upload for visibility on the web	1	0		
Dilluries	4 Decommision the existing root.cern server in favour of a simple reverse proxy (in openshift?) + S3/EOS (2024)	1	0		
	5 Make at least one release available for PIP, bringing this distribution channel to a beta for ROOT	2	0	0 %	
I/O	1 Enable schema evolution for std::auto_ptr <t> into std::unique_ptr<t> (2024)</t></t>	1	0	0 70	
and	2 Remove the 1GB size limitation for objects written via TTree and row-wise IO (2024)	1	0		
TTree	3 Consistency of std::int types across ROOT I/O (needs changes in TTree I/O) (2024)	2	0		
11100	4 Create a new prototype Experimental::RFile (replacement for TFile) that works smoothly with old and new APIs	2	0	0 %	
RNTuple	1 Take RNTuple classes out of experimental	_	0	0 /6	
ratrupio	Complete the first coherent set of schema evolution features	1	0		
	3 EP R&D: Implement a demonstrator of arbitrary combinations of chains and friends in the RNTupleProcessor	2	0		
	4 EP R&D: Design a first version of RNTuple metadata	2	0	0 %	
RooFit	1 Numeric integration in n-dim with CUDA (2024)	1	0	0 /0	
	2 EP R&D: Evaluation of custom user functions in CUDA (2024)	1	0		
	3 Perform analytical minimization of nuisance parameters related to MC statistical uncertainties (upstream from CMS Combine)		0		
	4 Enable discrete profile likelihood (upstream from CMS Combine)		0		
	5 Speedup the computation of the Hessian	1 2	0	0 %	
Analysis	1 Reach feature parity of TTree and RNTuple processing with RDF		0	0 70	
raidiyolo	2 RDataFrame: enable processing through internal bulk APIs (2024)		0		
	3 EP R&D: Deliver RDataFrame varied snapshots (2024)	1	0		
	Provide a mechanism to expose objectified NanoAOD preserving lazy reads (2024)	_	0	0 %	
Math	1 Improve histos and graphs interoperability with NumPy and UHI protocol and write code examples (2024)	1	0	0 70	
	2 Advance current new implementation to one testable by experiments, e.g. integrated at a protoype level with rdf (2024)	1	0		
	3 Make numerical algorithms interfaces better accessible from Python e.g. minimisers like Minuit (2024)	1	0		
	4 Update the documentation for the Minuit algorithm	2	0		
	5 SYCLOPS: Release a library for Lorentz vector computations on accelerators in SYCL (2024)	2	0	0 %	
Graphics	1 Implement auto generated GUI for selected REveElement members	2	0	- /*	
and	2 TScatter2D: Extension of TScatter (4-dim visualisation) to 5-dim	2	0		
Visualisation	3 Reduce the time needed and improve user experience of batch image production with web graphics		0		
	4 Improve documentation of TWebCanvas and RWebWindow classes	2	0		
	6 Improve REve client's window manger: undock action to spawn a new window, and increas performance of Geo Browser	2	0	0 %	
Interpreters	1 EP R&D Use CppInterOp to replace internals of TClingCallFunc, most notably the need to JIT strings	_	0		
	2 SYCLOPS Expose SYCL (prototype) support of ROOT's interpreter	2	0		

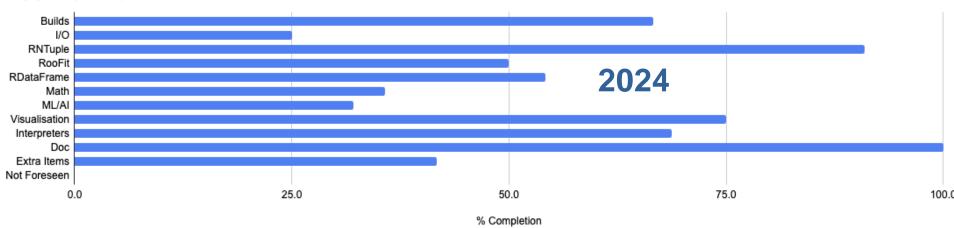
Let me know if something is not correct

overall: 0 % i.e. 0 / 35 items



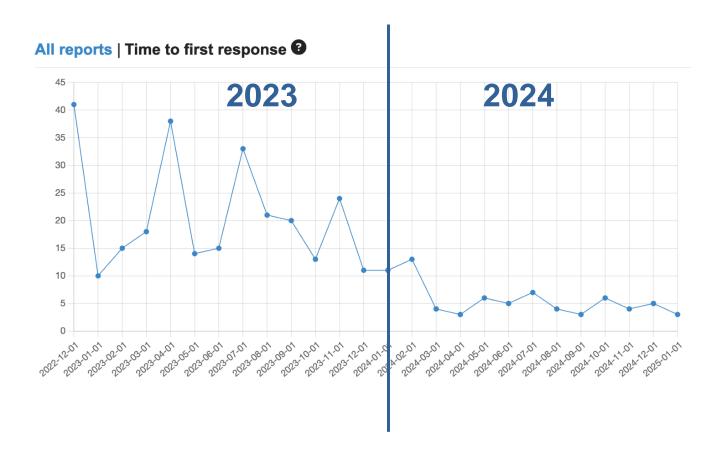








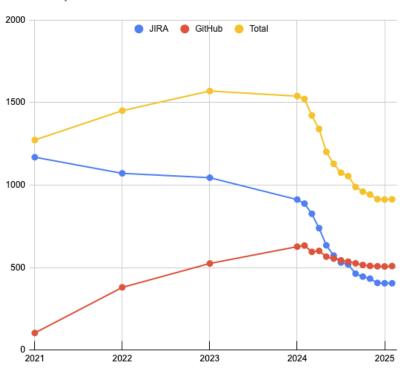
Forum during the Holidays







ROOT Open Issues



- ► -41% wrt 2023
- Started to increase during January:
 need to work on some open items
- Monotonic reduction of backlog while keeping up with new items is within reach, also for 2025