

Simulation Tools and Features

	2021-3				2021-4				2021-5				2021-6				2021-7				2021-8							
	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34		
Simulation Tools and Features	Simulation Tools and Features																											
Help ANNIE get started on Simulations	Work in progress 50%																											
Get ANNIE experiment setup to use artg4tk	New																											
Write module so artg4tk can read (...)	New																											
Write stepping/stacking action (...)	New																											
Write code to stop/write out artg4tk (...)	New																											
artg4tk	artg4tk																											
create benchmark for Mu2e pion production	New																											
create sensitive Detector which recods (...)	Assigned																											
Test running artg4tk on fermigrid	Assigned																											
G4WebApp	G4WebAppNG																											
G4WebAppNG	New																											
Evaluate single sign on service (...)	New																											
Geant4	Geant4																											
Development and maintenance of Geant4 (...)	Assigned 82%																											
Factorization and implementation (...)	Assigned 90%																											
research and include other high (...)	Assigned																											
improve statistical analysis tools (...)	Assigned 80%																											
add p+H double diff spectra	Assigned																											
Request for detailed control of selected (...)	New																											
G4 decays of charm particles is inadequate	New																											
verify tau decays	Assigned																											
work towards providing api to study (...)	Resolved																											
write guidelines regarding overlap checking	New																											
provide information regarding transition (...)	New																											
Add one or several hadronic tests to (...)	Assigned																											
Address missing decays of short-lived (...)	Assigned																											
Investigate mechanisms replacing the (...)	Assigned 10%																											

<p>follow up on pbar simulation enhancement (...)</p> <p>addition of NA49 p+H datasets</p> <p>expand p+Ta->pbar validation by including (...)</p> <p>perform statistical tests of (chi2 scan (...)</p> <p>document the change in the production (...)</p> <p>in geant4.9.6.p04, re-run test47 for (...)</p> <p>upload to the *upgraded* Val.Repository (...)</p> <p>Re-implement G4PhysListFactory</p> <p> G4 GNUMakefile support for builds (...)</p> <p>Validate 10.3.ref07</p> <p>Geant4Reweight</p> <p> Missing header in v01_00_02</p> <p>Geant4 Validation Repository</p> <p> uploading of tests</p> <p> automated upload to database (...)</p> <p> Configure http logging to central (...)</p> <p> provide undo delete feature</p> <p> transfer g4devel functionality (...)</p> <p> Implement proper search functionalities</p> <p>QSS</p> <p> Make plots of the intersection (...)</p> <p> Vary deltaInt parameter</p> <p> Perform simulations using a non-constant (...)</p> <p> Perform simulations using an artificial (...)</p> <p> Determine output units</p> <p> Create a test results page in the (...)</p> <p> Complete the Results page for the (...)</p> <p> Count Number of Crossings</p> <p> Document efficiency metrics</p> <p> make sure there exists a common (...)</p> <p>GENIE</p> <p> Study of # of knots in spline files</p> <p> Spline file generation and reduction</p> <p> Rework flux file globbing/wildcarding</p>	<p>Assigned</p> <p>Assigned 50%</p> <p>Assigned</p> <p>Assigned</p> <p>Resolved</p> <p>Resolved</p> <p>Assigned</p> <p>Work in progress</p> <p>Assigned</p> <p>Assigned 50%</p> <p> </p> <p>New</p> <p>Geant4 Validation Repository</p> <p>Resolved 90%</p> <p>Resolved 80%</p> <p>Resolved</p> <p>Resolved</p> <p>Resolved</p> <p>Resolved</p> <p>Resolved</p> <p>QSS</p> <p>Resolved</p> <p>New</p> <p>New</p> <p>New</p> <p>New</p> <p>New 90%</p> <p>New 10%</p> <p>New</p> <p>Resolved</p> <p>Resolved</p> <p>GENIE</p> <p>Assigned 30%</p> <p>Work in progress 90%</p> <p>Assigned 10%</p>
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Restructure Genie validation/Hadronization (...)	Assigned 63%
Port/update of the infrastructure (...)	Resolved
Evaluation of complex scenarios, (...)	Assigned 70%
export existing exp.datasets and (...)	Assigned 20%
Transition from Pythia6 to Pythia8	Assigned 60%
Expand features supported by Numerical/RandomGen	Assigned
Expand genie::RandomGen to fully (...)	Assigned
Expand genie::RandomGen to allow (...)	Assigned
Wrap CLHEP random # engine into (...)	Assigned
Add interface to nusoft/nutools-art (...)	Assigned
Validate / Expand VLE Mode	Assigned 67%
Check Strumia and Vissani on Argon	Assigned
Argon de-ex and low-Energy x-sec (...)	Assigned
Full Automated Validation Framework	Assigned 79%
Write scripting framework to build (...)	Assigned 50%
Grid access and permissions	Assigned 80%
Resolve CVMFS permissions and usage (...)	Assigned
push GENIE after successful build (...)	Assigned
notification / quality reporting	Assigned
Allow user to specify the UserPhysicsOptions (...)	New
Investigate GENIE/Geant interface for (...)	New 10%
Investigate Reported FSI Reweighting (...)	Assigned 10%
Transition to new Comparisons package	New 28%
MINERvA apps	New 20%
Version-to-version regression tests (...)	New
MiniBooNE and T2K apps	New
Dossier export	New
Dossier import	New
Numerical summary tables	New
Continuous integration	New 44%
Discuss partnerships with CI team	New 90%
Consult with CI team about unit (...)	New 90%
Large scale physics validation	New 40%
Multiple configurations	New

Begin using CI	New
Modify AVS scripting framework to run (...)	New 3%
Unit tests	New 22%
Unit tests pilot project	New 70%
Unit tests repository	New 30%
Unit tests framework	New 20%
First dozen tests	New 10%
Plan for updating test results	New
Unit test documentation	New