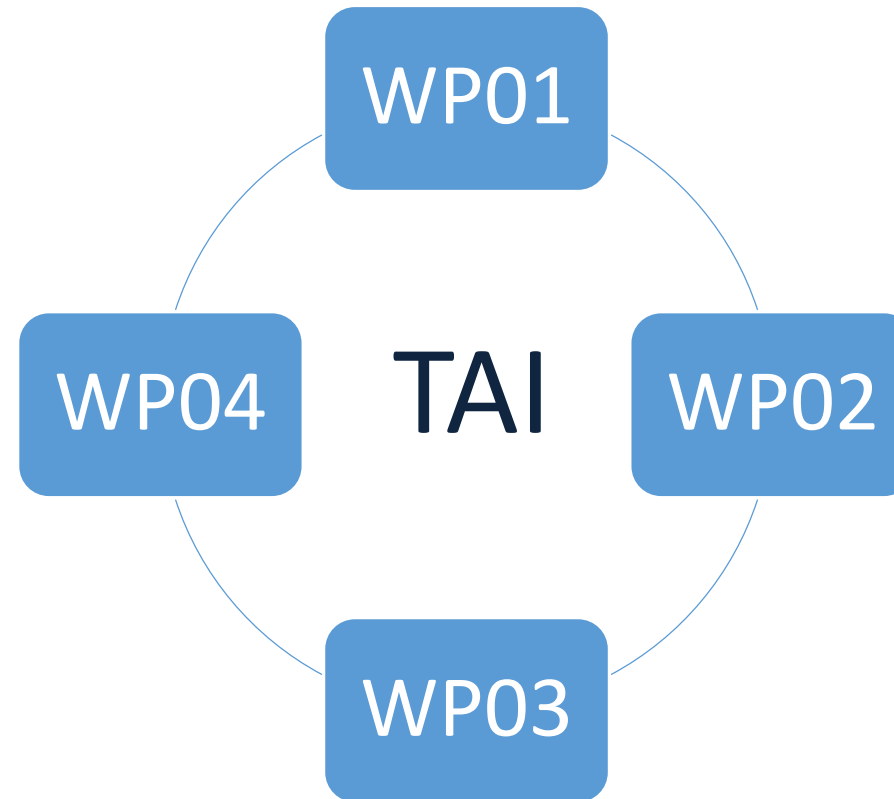
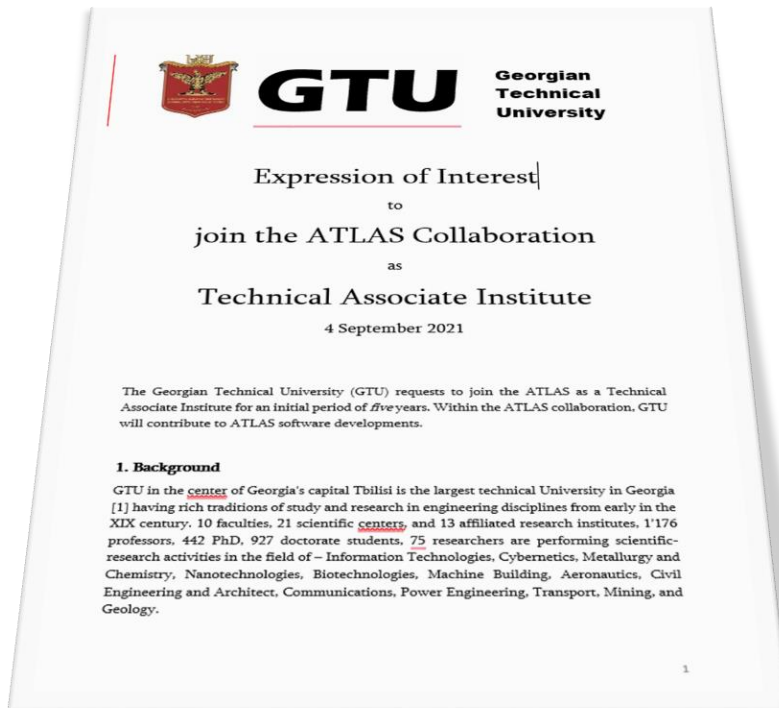




TAI Agreement - Status Challenges, Future Step

SHARMAZANASHVILI Alexander
Georgian Technical University

- Technical Associate Institute agreement with ATLAS started in 2022 and will follow up to 5 years



- WP01: ASCIG – Software Quality

Status: The work plan is done at 54%

Main problem: Manpower leave the team in April 2022 and there is not yet a replacement

Tasks:

1. Keep the current installations of CPPcheck and Coverity in working order and update the packages as needed
2. Run the automatic CPPcheck scans and associated tools to report the errors found to the authors of the relevant software packages
3. Set up automatic Coverity scanning processes, integrated with Gitlab and other tools used by software developers

	WP01 Plan for 2022	Status	Percentage
1.	Automation Modules for Cppcheck scanning	Done	100%
2.	Cppckeck scan for individual Merge Requests	Done	15%
3.	Automation modules for Coverity full scan	Done	100%
4.	Automation modules for Coverity incremental scan	Not Done	0%

■ WP02: Outreach & Education

Status: The work plan is done at 71%

Main problem: Big amount of R&D work for the development of the ARB 3D scenes

Tasks:

1. For Tracer/VR the geometry descriptions of the Point-1 civil engineering and services will be developed from existing CAD models and delivered at the end of 2022
2. For the Tracer/ART R&D work will be done on the first stage (end of 2022)
3. For the ARB, geometries for the 3D scenes will be developed according to the materials of the related printed documents. On average 5 scenes will be developed per year.

	WP02 Plan for 2022	Status	Percentage
1.	Development of the geometry descriptions of the Point-1 civil engineering and services	Done	90%
2.	R&D work for the Tracer/ART – engine selection	Done	70%
3.	Development of the ARB 3D scenes	Done	20%
4.	Development of the ARB software applications	Done	100%

■ WP03: Tile Calorimeter

Status: The work plan is done at 100%

Main problem: No major problems

Tasks:

1. 2 releases of the application - releases R1.0 and R2.0 in 2022
2. 2 releases of the application - R3.0 and R4.0 in 2023.

	WP03 Plan for 2022	Status	Percentage
1.	R1.0 of the visualization application	Done	100%
2.	R2.0 of the visualization application	Done	100%

* Short term visit of a Georgian student was done with the support of the Tile calorimeter group

- WP04: ITK Simulation

Status: The work plan is done at 73%

Main problem: Big amount of R&D work; understanding the ITK hardware; missing the technical data

Tasks:

1. Geometry descriptions of PP1 assemblies will be considered in the separate projects
2. Each project will foresee 9 consecutive stages of development
3. At each stage, deliverables will be technical reports of the geometry analyses and geometry descriptions in the CATIA platform and XML
4. On average 3 projects will proceed per year.

	WP04 Plan for 2022	Status	Percentage
1.	PP1 Outerwall Services (9 stages)	Done	100%
2.	PP1 Innerwall Services (9 stages)	Done	100%
3.	PP1 Inner Cylinder Endflange	Done	20%

- Participation in the ATLAS workshops:

1. ITK Startup meeting : 2022-02-08
2. ITK Plenary meeting : 2022-03-08 <https://indico.cern.ch/event/1065545/>
3. Outreach & Education workshop : <https://indico.cern.ch/event/1137747/>
4. Simulation Group Meeting : 2022-05-10 <https://indico.cern.ch/event/1154906/>
5. TileCAL Week : 2022-06-17 <https://indico.cern.ch/event/1169806/>
6. ITK Offline SW meeting : 2022-09-23 <https://indico.cern.ch/event/1202683/>
7. TileCAL Calibration, Data Quality, Performance and Processing : 2022-12-12
<https://indico.cern.ch/event/1214615/>
8. First PMBC'2022 Workshop : 2022-11-29 <https://indico.cern.ch/event/1226012/timetable/>

- Participation in the International Conferences on behalf of the ATLAS collaboration:
 1. LHCP2022 : Paper approved by the ATLAS speaker committee. Published in the proceedings
 2. ICHEP2022 : Paper approved by the ATLAS speaker committee
 3. ACAT2022 : Paper approved by the ATLAS speaker committee

Thanks!