



CBI 2013 design brief TALENT

Create future learning tools using TALENT technologies

Background

A variety of novel technologies (advanced radiation sensors, fast and low power consumption read-out and data acquisition electronics, new cooling technologies and ultra light mechanical support structures) are being developed in the TALENT project that have potential to be utilized in fields beyond particle physics. Your mission is to look at how learning occurs and explore how TALENT technologies could be applied to facilitate the creation and sharing of knowledge. You are expected to explore different ways of learning in different environments from elementary schools to joint research projects. After finding inspiration, you are expected to select a specific instance of learning you will focus on.

Possible directions for exploration

- How might we build a tool for students to learn how radiation or the ATLAS experiments work? (Elements supporting exploration/accessibility)
- How might we construct a set of ultra light building blocks with cooling and powering elements that can facilitate learning? (Elements supporting learning by experimentation/self discovery)
- How might we create a tool aiding the discovery/sharing of knowledge in a distributed, complex work environment? (Elements supporting shared learning)

Target users

The project outcomes should be beneficial for TALENT researchers. In addition you can consider

- students from e.g. elementary schools, universities
- teachers and educators
- elderly people

Challenges

- Finding unison between sophisticated technologies and human needs
- Selecting a focus early enough to reach a proof of concept level

Expected outcome

Proof of concept prototype that demonstrates in a compelling manner how the discovered solution facilitates the learning experience.