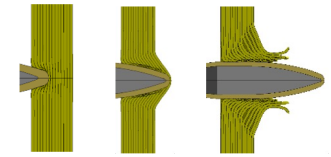


Structural integrity under extreme load



Topic: In-depth investigations on composite materials

•**TITLE:** Investigation into the mechanical behaviours of cloth-like composite materials

•**RESEARCH BACKGROUND:**

•The brittle matrix is believed to hinder the energy absorption of fabric -> applications that exploit a soft matrix (thermoplastic vs thermoset). However, the performance of composites with soft matrix has to be investigated and modelling approaches are complex.

•**RESEARCH ACTIVITIES:**

1. Characterize the material properties of cloth-like composites
2. Perform impact tests on the cloth-like composites
3. Understand mechanical response of cloth-like composites with a numerical methodology

•**METHODOLOGY:** Experimental – Numerical

•**DURATION:** 9 months

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•**POSSIBLE COLLABORATIONS:**

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