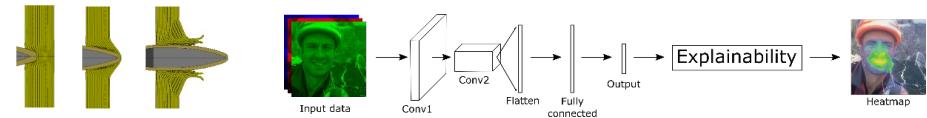


Structural integrity under extreme load



Topic: In-depth investigations on composite materials

- **TITLE:** Modelling of nanocomposites

- **RESEARCH BACKGROUND:**

Adding nanofillers inside composite materials can not only improve the mechanical properties but also introduce multifunctional applications. The modelling of nanocomposites can be helpful for their design and applications.

- **RESEARCH ACTIVITIES:**

1. Study different modelling strategies on nanocomposites
2. Modify/develop methods for the modelling of nanocomposites
3. Introduce multifunctional properties into the numerical modelling (optional)
4. Develop an algorithm with machine learning method for nanocomposites (optional)

- **METHODOLOGY:** Numerical – Programming – Experimental

- **DURATION:** 9 months

- **CONTACTS:**

andrea.manes@polimi.it
dayou.ma@polimi.it
francesco.cadini@polimi.it
marco.giglio@polimi.it

- **POSSIBLE COLLABORATIONS:**

Universidad Rey Juan Carlos (Spain)

