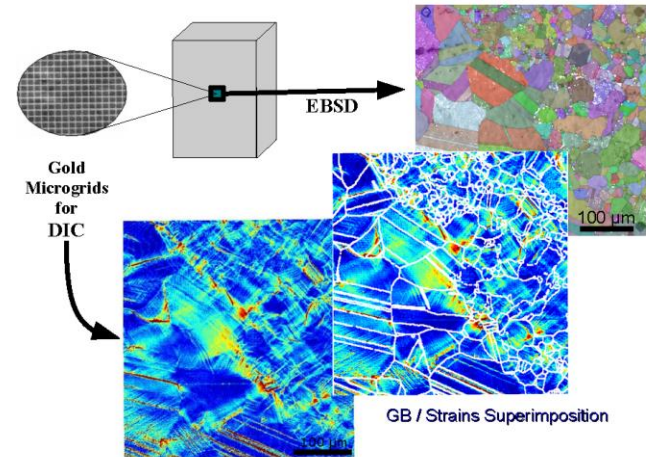




Mechanical tests and field measurements inside a scanning electron microscope

SEMINAR

Mechanical testing inside a scanning electron microscope is a powerful tool to investigate the mechanical properties of materials at the scale of their microstructure. The first part of this talk will introduce the principle of scanning electron microscopy as well as microstructure characterization by using electron back scattering diffraction (EBSD) technique and strain field measurements by using digital image correlation (DIC). Then, the methodology applied in our laboratory for the investigation of the links between microstructure and macroscopic mechanical behaviour will be presented. The last part of my talk will be devoted to the presentation of some applications on different polycrystalline materials such as rock salt, titanium aluminides, titanium alloys, ...



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November 19, 10:30am (sharp)
Seminar Room, sez. Idraulica
Via Ferrata, 3 – Pavia