An introduction to tensor calculus

The course presents basic concepts of tensor calculus, with special emphasis on applications in differential geometry and continuum mechanics. The purpose is to condense the basic definitions and techniques arising in tensor calculus, differential geometry and continuum mechanics in order to (1) develop a physical understanding of the mathematical concepts associated with tensor calculus and (2) develop the basic equations of tensor calculus, differential geometry and continuum mechanics which arise in engineering applications. The material is presented in an informal manner and uses mathematics which minimizes excessive formalism. The presentation assumes the students have some knowledge from the areas of matrix theory, linear algebra and advanced calculus. Each section includes many illustrative worked examples.

Via Claudio, 21 – ed. 6 - aula Manfredi Romano (1° piano)

Tutti gli interessati sono invitati a partecipare