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Autore	R. Eugster Simon
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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Introduction -- Part I Geometric Continuum Mechanics -- Part II Induced Beam Theories.
Sommario/riassunto	This research monograph discusses novel approaches to geometric continuum mechanics and introduces beams as constraint continuous bodies. In the coordinate free and metric independent geometric formulation of continuum mechanics as well as for beam theories, the principle of virtual work serves as the fundamental principle of mechanics. Based on the perception of analytical mechanics that forces of a mechanical system are defined as dual quantities to the kinematical description, the virtual work approach is a systematic way to treat arbitrary mechanical systems. Whereas this methodology is very convenient to formulate induced beam theories, it is essential in geometric continuum mechanics when the assumptions on the physical space are relaxed and the space is modeled as a smooth manifold. The book addresses researcher and graduate students in engineering and mathematics interested in recent developments of a geometric formulation of continuum mechanics and a hierarchical development of

induced beam theories.
