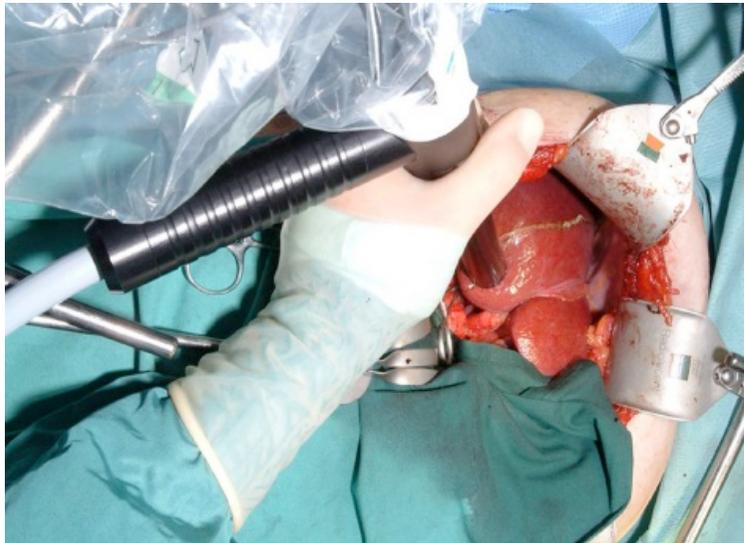


Experimental characterization of soft human tissue

Experimental observations of the mechanical behavior of soft tissue are essential for determining model parameters of phenomenological model equations, and are useful for verifying the predictive capabilities of physically based model formulations. Constitutive equations often aim at describing the in vivo mechanical behavior of tissues and organs when subjected to physiological conditions of loading and deformation. Our work contributes to the attainment of corresponding experimental data. Three aspects will be considered in the talk: (i) characterization of biological membranes subjected to uniaxial and biaxial stress states, (ii) in vivo measurement of the mechanical response of soft human organs using the aspiration method and (iii) whole organ experiments to validate corresponding finite element models.



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MS1 Conference Room,
Department of Structural Mechanics,
Via Ferrata,1 – Pavia