

Splitting schemes for different poromechanics models

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In this talk we present robust splitting schemes for linear or nonlinear Biot models [1, 2]. The splitting is of the fixed-stress type [5, 4] and the linearization is obtained by using the *L*-scheme [6] or the Newton method. Different models (corresponding to relevant applications) are considered: large deformations [2], an erosion problem with a moving boundary [3] or a soft material poromechanics model as appears in biomedical applications [8]. The convergence of the schemes, including optimization will be discussed. Illustrative numerical examples will be presented.

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