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A hybrid numerical model for multiphase fluid flow in a deformable porous medium

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Highlights

- A fully coupled solution for multiphase flow-deformation problems is presented
- A hybrid solution with combining FEM and FVM is presented.
- The method preserves local conservation of mass.
- The method is able to deal with complex geometries.
- It combines the mesh flexibility of FEM with the local conservative characteristic of FVM.

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