
Jill Reese
**Simulating Non-Darcy Flow through Porous Media using
Sundance**

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A non-Darcy partial differential equation (PDE) model for flow through porous media is presented. The focus is on the numerical implementation of the model using Sandia National Laboratories PDE simulation framework, Sundance. In particular, the discussion will include the finite element discretization and how parallelism is accomplished.