

Poster

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The Muskat problem is a fundamental free boundary problem in fluid dynamics, modeling the interface between two immiscible fluids in porous media. It has significant applications in petroleum engineering, hydrology, and mathematical physics. The problem is governed by a set of coupled partial differential equations (PDEs) describing the evolution of the interface due to viscosity and density differences between the fluids.

The topics covered in this course would be of great assistance in advancing my thesis. Gaining a deeper understanding of mathematical modeling, numerical analysis, and fluid dynamics will provide me with the necessary tools to tackle the complex challenges of the Muskat problem and enhance the quality of my research