

Title: Free Boundary Problems  
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Abstract: A free boundary problem is a PDE to be solved for an unknown domain  $\Omega$ . In other words, a domain of a solution is determined by the PDE. The boundary of  $\Omega$  is called the free boundary. In this seminar, I will introduce the Hele Shaw problem, the Stefan problem and a problem arising from flame propagation, as examples of free boundary problems. I will also talk about my recent research on flame propagation.