

1021-35-151

Luis E. Silvestre*, Courant Institute of Mathematical Sciences., New York University, 251
Mercer Street, New York, NY 10012. *Lower dimensional obstacle problems.*

The obstacle problem is a free boundary problem in which one considers that smallest supersolution of an elliptic PDE that lies above some given obstacle. We will talk about a variation in which the obstacle constraint is given only in a hypersurface inside the domain, and we will connect this problem with the fractional laplace operator. (Received September 03, 2006)