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Juan J Manfredi* (manfredi@pitt.edu), Department of Mathematics, University of Pittsburgh, Pittsburgh, PA 15215, and **Julio D Rossi** and **Stephanie J Somersille**. *An Obstacle Problem for Tug-of-war Games.*

We present an interpretation of the obstacle problem for the ∞ -Laplacian using tug-of-war games. Given Lipschitz boundary data and obstacle, we prove existence and uniqueness of a super infinity-harmonic function constrained to lie above the obstacle and that it is infinity-harmonic when it is above the obstacle. Moreover, we show that this function is the limit of value functions of a game we call obstacle tug-of-war. (Received August 16, 2013)