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Titolo	A Course on Tug-of-War Games with Random Noise : Introduction and Basic Constructions // by Marta Lewicka
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Descrizione fisica	1 online resource (ix, 254 pages) : illustrations
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Soggetti	Potential theory (Mathematics) Probabilities Mathematical analysis Analysis (Mathematics) Potential Theory Probability Theory and Stochastic Processes Analysis
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Nota di contenuto	1 Introduction -- 2 The linear case: random walk and harmonic functions -- 3 Tug-of-War with noise. Case p (2,) -- 4 Boundary aware tug-of-war with noise. Case p (2,) -- 5 Game-regularity and convergence. Case p (2,) -- 6 Mixed tug-of-war with noise. Case p (1,) -- A Background in probability -- B Background in Brownian motion -- C Background in PDEs. D Solutions to selected exercises -- References -- Index.
Sommario/riassunto	This graduate textbook provides a detailed introduction to the probabilistic interpretation of nonlinear potential theory, relying on the recently introduced notion of tug-of-war games with noise. The book explores both basic and more advanced constructions, carefully explaining the parallel between linear and nonlinear cases. The presentation is self-contained with many exercises, making the book suitable as a textbook for a graduate course, as well as for self-study.

Extensive background and auxiliary material allow the tailoring of courses to individual student levels.
