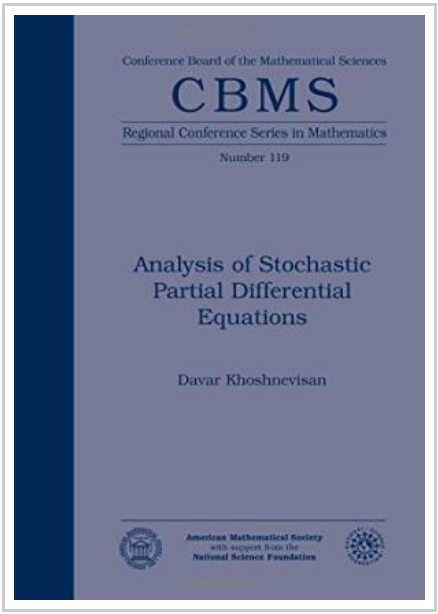

Analysis of Stochastic Partial Differential Equations

By Davar Khoshnevisan

American Mathematical Society. Paperback. Book Condition: new. BRAND NEW, Analysis of Stochastic Partial Differential Equations, Davar Khoshnevisan, The general area of stochastic PDEs is interesting to mathematicians because it contains an enormous number of challenging open problems. There is also a great deal of interest in this topic because it has deep applications in disciplines that range from applied mathematics, statistical mechanics, and theoretical physics, to theoretical neuroscience, theory of complex chemical reactions [including polymer science], fluid dynamics, and mathematical finance. The stochastic PDEs that are studied in this book are similar to the familiar PDE for heat in a thin rod, but with the additional restriction that the external forcing density is a two-parameter stochastic process, or what is more commonly the case, the forcing is a "random noise," also known as a "generalized random field." At several points in the lectures, there are examples that highlight the phenomenon that stochastic PDEs are not a subset of PDEs. In fact, the introduction of noise in some partial differential equations can bring about not a small perturbation, but truly fundamental changes to the system that the underlying PDE is attempting to describe. The topics covered include a brief introduction to...

Reviews

This composed book is excellent. This really is for all who statte that there had not been a worth reading through. Your life period will probably be change as soon as you total looking over this ebook.

-- ***Cheyanne Barrows***

The book is fantastic and great. I have go through and i also am certain that i will planning to read through once more once more down the road. Its been printed in an exceedingly simple way and is particularly simply after i finished reading through this publication through which really changed me, change the way i think.

-- ***Hank Powlowski***