

# Fundamentals of Discrete Element Methods for Rock Engineering: Theory and Applications, Volume 85 (Developments in Geotechnical Engineering)

Lanru Jing, Ove Stephansson

Download now

Click here if your download doesn"t start automatically

# Fundamentals of Discrete Element Methods for Rock Engineering: Theory and Applications, Volume 85 (Developments in Geotechnical Engineering)

Lanru Jing, Ove Stephansson

Fundamentals of Discrete Element Methods for Rock Engineering: Theory and Applications, Volume 85 (Developments in Geotechnical Engineering) Lanru Jing, Ove Stephansson

This book presents some fundamental concepts behind the basic theories and tools of discrete element methods (DEM), its historical development, and its wide scope of applications in geology, geophysics and rock engineering. Unlike almost all books available on the general subject of DEM, this book includes coverage of both explicit and implicit DEM approaches, namely the Distinct Element Methods and Discontinuous Deformation Analysis (DDA) for both rigid and deformable blocks and particle systems, and also the Discrete Fracture Network (DFN) approach for fluid flow and solute transport simulations. The latter is actually also a discrete approach of importance for rock mechanics and rock engineering. In addition, brief introductions to some alternative approaches are also provided, such as percolation theory and Cosserat micromechanics equivalence to particle systems, which often appear hand-in-hand with the DEM in the literature. Fundamentals of the particle mechanics approach using DEM for granular media is also presented.

- · Presents the fundamental concepts of the discrete models for fractured rocks, including constitutive models of rock fractures and rock masses for stress, deformation and fluid flow
- · Provides a comprehensive presentation on discrete element methods, including distinct elements, discontinuous deformation analysis, discrete fracture networks, particle mechanics and Cosserat representation of granular media
- · Features constitutive models of rock fractures and fracture system characterization methods detaiing their significant impacts on the performance and uncertainty of the DEM models



Read Online Fundamentals of Discrete Element Methods for Roc ...pdf

Download and Read Free Online Fundamentals of Discrete Element Methods for Rock Engineering: Theory and Applications, Volume 85 (Developments in Geotechnical Engineering) Lanru Jing, Ove Stephansson

#### From reader reviews:

### Walter McBride:

The book untitled Fundamentals of Discrete Element Methods for Rock Engineering: Theory and Applications, Volume 85 (Developments in Geotechnical Engineering) is the publication that recommended to you to see. You can see the quality of the guide content that will be shown to you. The language that creator use to explained their way of doing something is easily to understand. The author was did a lot of research when write the book, hence the information that they share to you is absolutely accurate. You also could possibly get the e-book of Fundamentals of Discrete Element Methods for Rock Engineering: Theory and Applications, Volume 85 (Developments in Geotechnical Engineering) from the publisher to make you much more enjoy free time.

### **Anna Maples:**

Do you have something that you like such as book? The guide lovers usually prefer to decide on book like comic, small story and the biggest an example may be novel. Now, why not hoping Fundamentals of Discrete Element Methods for Rock Engineering: Theory and Applications, Volume 85 (Developments in Geotechnical Engineering) that give your satisfaction preference will be satisfied simply by reading this book. Reading behavior all over the world can be said as the means for people to know world considerably better then how they react towards the world. It can't be mentioned constantly that reading practice only for the geeky man but for all of you who wants to end up being success person. So, for every you who want to start examining as your good habit, you could pick Fundamentals of Discrete Element Methods for Rock Engineering: Theory and Applications, Volume 85 (Developments in Geotechnical Engineering) become your starter.

#### **Joseph Bateman:**

As a university student exactly feel bored for you to reading. If their teacher asked them to go to the library or even make summary for some guide, they are complained. Just tiny students that has reading's heart and soul or real their passion. They just do what the educator want, like asked to the library. They go to generally there but nothing reading seriously. Any students feel that studying is not important, boring in addition to can't see colorful pictures on there. Yeah, it is to become complicated. Book is very important for yourself. As we know that on this period of time, many ways to get whatever we wish. Likewise word says, many ways to reach Chinese's country. Therefore, this Fundamentals of Discrete Element Methods for Rock Engineering: Theory and Applications, Volume 85 (Developments in Geotechnical Engineering) can make you really feel more interested to read.

### **Richard Eby:**

Some individuals said that they feel weary when they reading a guide. They are directly felt it when they get

a half elements of the book. You can choose often the book Fundamentals of Discrete Element Methods for Rock Engineering: Theory and Applications, Volume 85 (Developments in Geotechnical Engineering) to make your personal reading is interesting. Your current skill of reading expertise is developing when you just like reading. Try to choose easy book to make you enjoy to study it and mingle the impression about book and studying especially. It is to be initially opinion for you to like to wide open a book and study it. Beside that the publication Fundamentals of Discrete Element Methods for Rock Engineering: Theory and Applications, Volume 85 (Developments in Geotechnical Engineering) can to be your brand-new friend when you're feel alone and confuse with what must you're doing of this time.

Download and Read Online Fundamentals of Discrete Element Methods for Rock Engineering: Theory and Applications, Volume 85 (Developments in Geotechnical Engineering) Lanru Jing, Ove Stephansson #XZUJ2IVH0EQ

## Read Fundamentals of Discrete Element Methods for Rock Engineering: Theory and Applications, Volume 85 (Developments in Geotechnical Engineering) by Lanru Jing, Ove Stephansson for online ebook

Fundamentals of Discrete Element Methods for Rock Engineering: Theory and Applications, Volume 85 (Developments in Geotechnical Engineering) by Lanru Jing, Ove Stephansson Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Fundamentals of Discrete Element Methods for Rock Engineering: Theory and Applications, Volume 85 (Developments in Geotechnical Engineering) by Lanru Jing, Ove Stephansson books to read online.

Online Fundamentals of Discrete Element Methods for Rock Engineering: Theory and Applications, Volume 85 (Developments in Geotechnical Engineering) by Lanru Jing, Ove Stephansson ebook PDF download

Fundamentals of Discrete Element Methods for Rock Engineering: Theory and Applications, Volume 85 (Developments in Geotechnical Engineering) by Lanru Jing, Ove Stephansson Doc

Fundamentals of Discrete Element Methods for Rock Engineering: Theory and Applications, Volume 85 (Developments in Geotechnical Engineering) by Lanru Jing, Ove Stephansson Mobipocket

Fundamentals of Discrete Element Methods for Rock Engineering: Theory and Applications, Volume 85 (Developments in Geotechnical Engineering) by Lanru Jing, Ove Stephansson EPub