

UNIVERSITY OF MACAU
FACULTY OF SCIENCE AND TECHNOLOGY
DEPARTMENT of
CIVIL AND ENVIRONMENTAL ENGINEERING

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"Difference between the continuum and DEM fabric tensors"

by

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Date: 23/07/2015 (THURSDAY)

Time: 11:00AM – 12:00PM

Venue: E11 - 1006

Abstract

In granular mechanics, macroscopic approaches treat a granular material as a continuum at macro-scale, and study its constitutive relationship between stresses and strains. On the other hand, microscopic approaches consider a granular material as an assembly of individual particles interacting with each other at micro-scale, and the physical quantities under study are forces and displacements. This presentation will focus on the macroscopic quantification of the internal structure in terms of the fabric tensor. The correlations among different fabric tensors and their relations with the stress–strain behavior will be discussed.

Biography

Professor Emeritus of Hong Kong University of Science and Technology, X.S. Li's research interests include soil dynamics and geotechnical earthquake engineering; constitutive modeling of engineering materials; numerical and centrifuge modeling of geotechnical structures; lab testing; instrumentation, control, signal processing for structural and geotechnical experiments.

ALL ARE WELCOME!