Finite Element Stability Analysis

Prof. D. V. Griffiths

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Seminar overview:

The seminar will highlight the benefits of the finite element method for geotechnical stability analysis. Topics covered in the talk will include:

- A review of 3D slope stability analysis and the analysis of "long" slopes
- A novel formulation that enables a direct analytical comparison to be made between load and resistance factors in stability analysis of slopes and foundations
- A correction to a classical paper on slope stability with linearly increasing undrained strength

Biography:

Vaughan Griffiths's interests lie in application of finite element and risk assessment methodologies in civil engineering. His research papers include some of the most highly cited in the geotechnical engineering research literature. He is the co-author of three textbooks that have gone into multiple editions including the Chinese language on "Programming the Finite Element Method", "Risk assessment in Geotechnical Engineering" and "Numerical Methods for Engineers". He gives regular short-courses on Risk Assessment in Geotechnical engineering for practitioners, with recent offerings in China, New Zealand, Australia, Colombia, Norway, Canada and the USA. Professor Griffiths is a former ASCE Director, an editor-in-chief of Computers and Geotechnics, and was on the Advisory Panel of Géotechnique from 2012-2018. In 2017, he received the H. Bolton Seed Medal from the ASCE/Geo-Institute and was named the Cross-Canada Lecturer by the Canadian Geotechnical Society.

When and where:
Wednesday, 1st of May, 19:00 – 20:00
Graduate Union

Queries:
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