Saskia Loosveldt Tomàs
Communication Skills I

Assignment 3: Critical Review

The seminar on the Numerical Analysis of Factors of Safety and Probabilities of Failure in Geotechnical Engineering reviewed was given by D.V. Griffiths, PhD. from the Colorado School of Mines.

The talk focused on the shift of paradigms in risk assessment; which traditionally were based on the factor of safety, whereas nowadays the stability analysis is based on the probability of failure.

The speaker introduced the three levels of analysis of risk assessement based on the probability of failure:

- The first one consisted on the development of an event tree by an expert panel
- The second one was based on 1st Order Methods (FORM)
- An the third one based on Random Finite Element Methods (RFEM), which was the most relevant from the masters point of view.

The focus of the presentation was on RFEM methods and their accuracy, which so far have not been covered in any of the master's courses, but it was interesting to see the application of a method based in FEM to solve real-life issues.

Personally, I was not familiar with the topic that was being discussed but I think that the speaker did an excellent job in introducing the basics of his work. His explanations where clear and easy to follow; and even though he was a native English speaker, I think he made sure to use a pace and vocabulary that could be followed and understood by the audience, composed of mainly non-native speakers.

On the other hand, the speaker had the tendency to touch the screen but he realised his habit and stopped doing it.

Finally, the speaker made sure to share his code and encouraged the audience to contact him in order to contribute in its further development.

Overall and in conclusion, I think that the speaker made a clear introduction in order to follow his work but then focused on the most relevant level of analysis to his audience.