

## **'Anchor Analyzer' Simulation Software**

AnchorAnalyzer is a PC based software application that simulates the static and dynamic behavior of protection systems used in technical rescue and recreational climbing. It can be used as an effective visualization tool in the hands of a qualified instructor, but it should not be used to design anchor systems due to inaccuracies introduced by its simplified models.

The user draws the topology of a protection system on a graphical user interface (GUI), and specifies the materials used. The mouse is then used to alter the direction of pull in static simulations, or to raise and drop a load in dynamic simulations. Force vs. time on all tethers can be displayed graphically.

The presentation will demonstrate the use of AnchorAnalyzer to simulate the behavior of various anchor topologies. The following topics will be discussed:

- Introduction
- Demonstrations
- Algorithms
- Accuracy
- Potential Uses
- Current Limitations and Further Work
- Availability