



Contribution ID: 147

Type: **Oral Presenter**

## **Effect of the confining method on the cyclic undrained behaviors of sand**

*Monday 2 April 2018 15:25 (25 minutes)*

Cyclic Simple Shear (CSS) test is widely considered to best simulate vertically propagating shear waves and in-situ stress conditions. CSS test is always performed to generate reliable laboratory data for development and calibration of models in Geotechnical Earthquake Engineering design. Soil sample is laterally confined to simulate in-situ stress condition ( $k_0$ ). Stacked rings (SR) and Wire-reinforced membranes (WR) are the two widely used confining methods. Studies have been conducted on the effect of the two confinement methods on the static behavior of soil. In this paper, the effect of the SR and WR confinement methods on the dynamic soil behavior is studied. The comparison of the undrained stress controlled cyclic CSS tests results indicated that the dynamic behavior of the two confinement methods is mostly similar.

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**Session Classification:** Civil Engineering

**Track Classification:** Civil & Construction Engineering