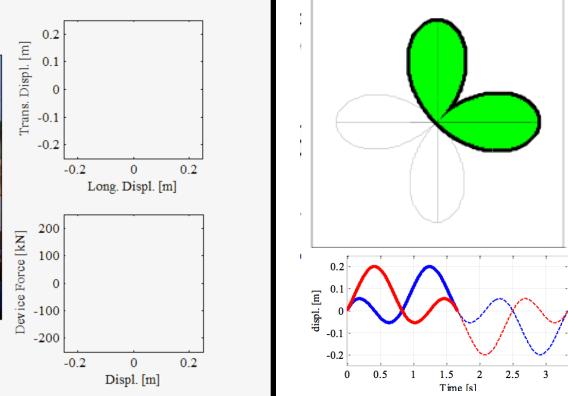


# NCREE Tainan Laboratory Grand Opening Forum

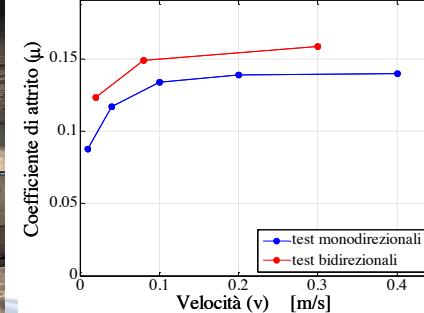
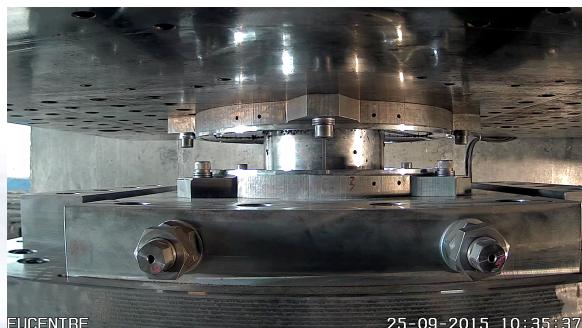
## Topic 2 - Innovative Experimental Technologies and Numerical Simulation Methods

Alberto Pavese (a.pavese@unipv.it) - University of Pavia, EUCENTRE, Pavia (Italy)

### Experimental comparison between monoaxial and biaxial cyclic response – Friction Model implementation



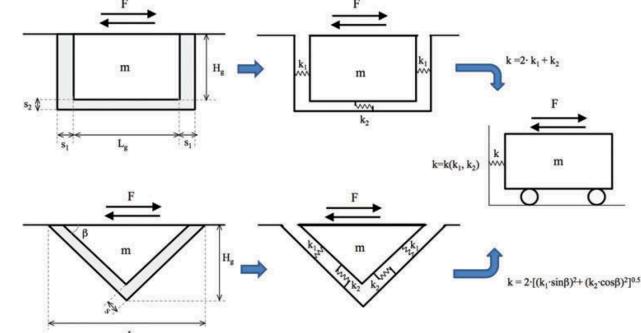
Materiale B - W=796 kN



$$\mu(W, v, E) = (\mu_w \cdot k_v) \cdot k_E = \mu_{vw} \cdot k_E = \mu_{vw} \left( p_E + (1 - p_E) \cdot e^{\left(\frac{E}{W}\right) \cdot \epsilon_r} \right)$$

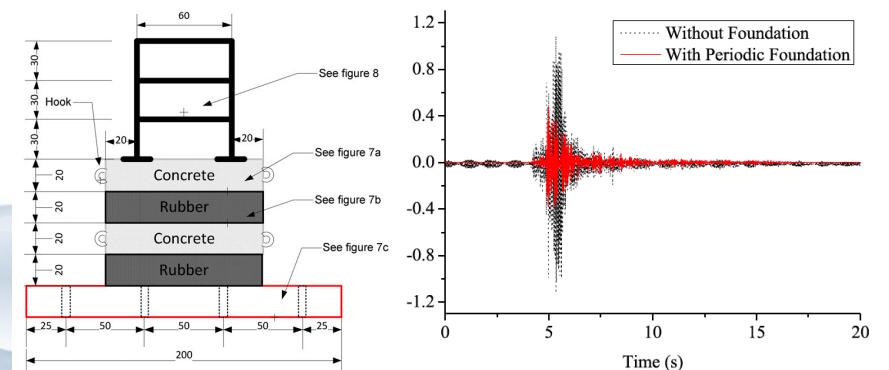
### Soil-structure interaction

Use of resonators (TMD), soft barriers to reduce seismic waves propagation and effects on structures



Large scale simulation to increase knowledge on this novel technique for seismic protection. Hybrid test can be used?

Relevant interest for protection of existing structures and monuments



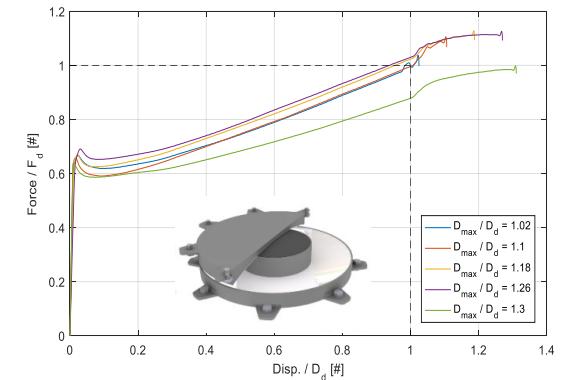
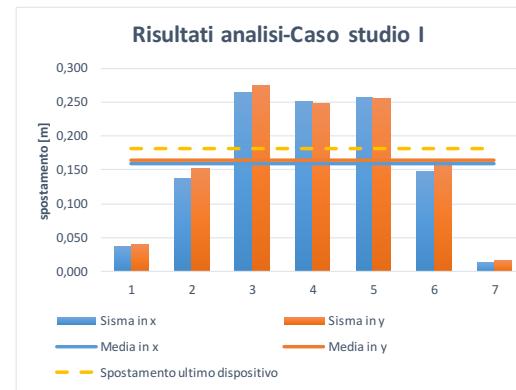
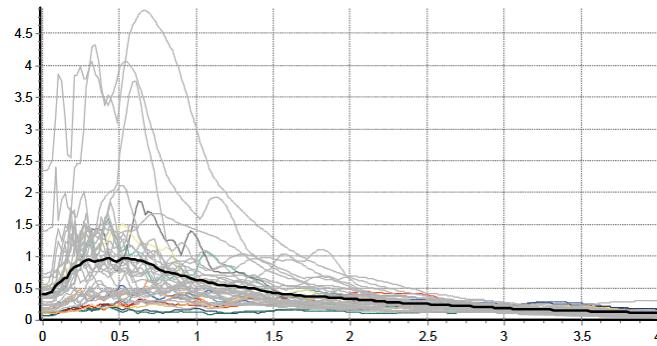
# NCREE Tainan Laboratory Grand Opening Forum

## Topic 2 - Innovative Experimental Technologies and Numerical Simulation Methods

Alberto Pavese (a.pavese@unipv.it) - University of Pavia, Foundation EUCENTRE, Pavia

### Seismic Isolation

Reliability of design, experimental verification, extra displacement capacity test



Hybrid simulation of isolated structures to assess demand under real input earthquakes

