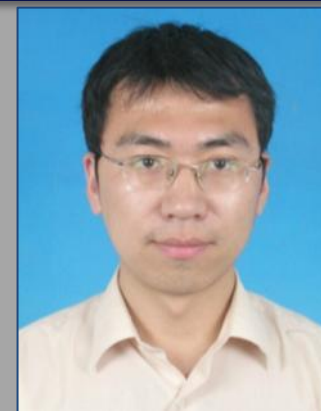
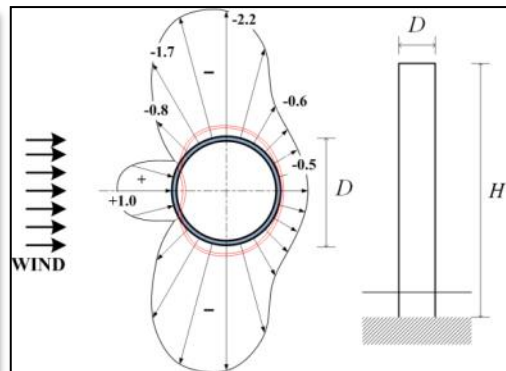
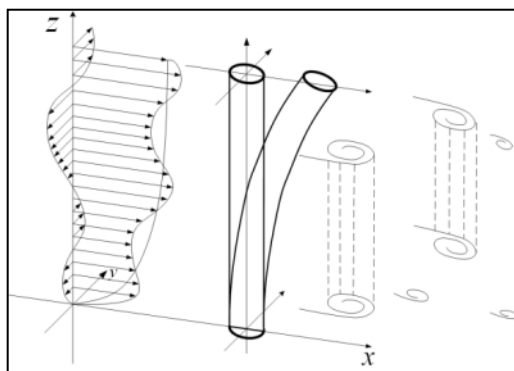


New Frontier of Education and Research in Wind Engineering

Interaction between overall behaviors and local behaviors of the structures under wind load

1. Background

- It is difficult to distinguish which part is the structure frame and which part are the claddings, and there is still no specific wind load design code for Monocoque structures and its members.
- Importance of considering the interference between local and overall behavior due to wind load for wind sensitive structures, such as Monocoque structures, large span roof



Name and Stand
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Hometown
Xinghua, Jiangsu, China

Profile Study

I attained B.E. degree from Southeast University, China in 2003 and earned my M.E. degree from Tongji University, China in 2006.

Work

I had worked three years in Highway and Bridge Consultants Company in Beijing, China. Be engaged in the fields of detection and construction control of bridges

2. Procedure

Wind Tunnel Test

Pressure Data

- Pressure Distribution : Key Zones
- Expand the pressure data to nodes of FE model

FEM Analysis

Time-history Analysis (ANSYS)

- FE Model
- Response of the Structure

Result Analysis

Identification

- Whole Wind Load Effects, Local Wind Load Effects and the Interference



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The titles of my M.E. thesis is 'Vortex-induced vibration and reduction of free-standing tower of cable-supported bridge'. Study in a systemic research on vortex-induced vibration and its control of free-standing bridge pylons, including wind tunnel experiment, CFD numerical simulation and theoretical formulation

And now, I am very happy to be able to be a PhD candidate as a member of Global COE in Tokyo Polytechnic University. The title of my PhD topic is 'Interaction between overall behaviors and local behaviors of the structures under wind load'.

