

Civil Engineering in Your Hands:

- Exploring Structures and Soil through Simple Experiments and Simulations -

◆ **Instructor** : Assist. Prof. Kumpei TSUJI (022-795-7418, kumpei.tsuji.e1@tohoku.ac.jp)

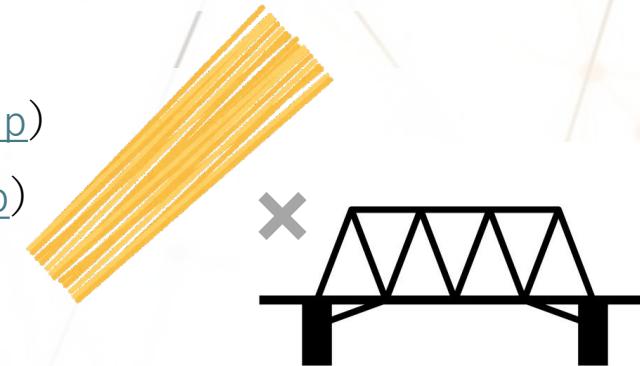
Prof. Yuki YAMAKAWA (022-795-7417, yuki.yamakawa.c7@tohoku.ac.jp)

◆ **First class** : Monday, October 6, 16:20-

※Subsequent classes will be held intensively. The schedule will be arranged in the first class.

◆ **Location** : Civil Eng. and Architecture Education and Research Building [\(F01\)](#)

Room 404 (Mathematical System Design Laboratory)



Pasta Bridge Contest

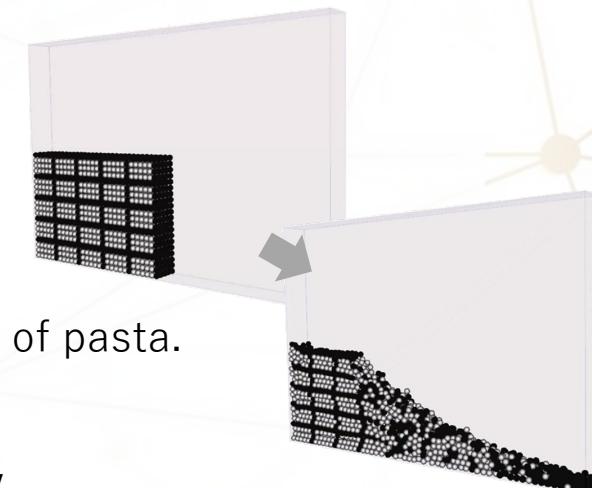
◆ **Theme** : "Civil engineering experiments, Numerical simulation"

1. Pasta Bridge Contest (First Half):

Experience the basics of structural mechanics by building a 30 cm-long bridge out of pasta.

2. Sand and Granular Experiment + Simulation (Second Half):

How well can we simulate the behavior of "soil" using numerical methods? → V&V



Numerical simulation
with DEM (Discrete Element Method)