Legend

## *Section 3.1*
- File Name:
    1. File "Section_3.1_Conf#1.mat" is referred to the experimental analysis of Configuration #1 in Section 3.1;
    2. File "Section_3.1_Conf#2.mat" is referred to the experimental analysis of Configuration #2 in Section 3.1;
    3. File "Section_3.1_Conf#3.mat" is referred to the experimental analysis of Configuration #3 in Section 3.1.
- Each file contains the following elements:
    1. "time2": Time sampling vector of 40000 elements (sampling frequency 1 kHz);
    2. "For": External recorded acceleration base excitation matrix
    3. "Acc": Recorded upper plate relative acceleration matrix.
- Taking into account the ergodicity property, samples of the matrixes "For" and "Acc" have been obtained subdividing a continuous recorded sample of 440000 elements in 11 different samples of 40000 elements each. In this way comparison among experimental and numerical results may be performed considering as initial condition for the sample *i* (with *i=2,...,11*) the final values of the sample *(i-1)*.
- Results presented in the corresponding paper have been obtained excluding the first sample, in order to consider only the stationary response of the system.
- These recorded samples have been used also for results presented in Fig. 11 of the corresponding paper.

## *Section 3.2*
- File Name:
    4. File "Section_3.2_Conf#1.mat" is referred to the experimental analysis of Configuration #1 in Section 3.2;
    5. File "Section_3.2_Conf#2.mat" is referred to the experimental analysis of Configuration #2 in Section 3.2;
    6. File "Section_3.2_Conf#3.mat" is referred to the experimental analysis of Configuration #3 in Section 3.2.
- Each file contains the following elements:
    4. "time2": Time sampling vector of 24998 elements (sampling frequency 1 kHz);
    5. "For": External recorded acceleration base excitation matrix
    6. "Disp": Recorded water surface displacement matrix.
- Taking into account the ergodicity property, samples of the matrixes "For" and "Disp" have been obtained subdividing a continuous recorded sample of 499960 elements in 20 different samples of 24998 elements each. In this way comparison among experimental and numerical results may be performed considering as initial condition for the sample *i* (with *i=2,...,20*) the final values of the sample *(i-1)*.

## *Section 3.3*
- File Name:
    7. File "Section_3.3_Conf#1.mat" is referred to the experimental analysis of Configuration #1 in Section 3.3;
    8. File "Section_3.3_Conf#2.mat" is referred to the experimental analysis of Configuration #2 in Section 3.3;
    9. File "Section_3.3_Conf#3.mat" is referred to the experimental analysis of Configuration #3 in Section 3.3.
- Each file contains the following elements:

7. "time2": Time sampling vector of 40000 elements (sampling frequency 1 kHz);
8. "For": External recorded acceleration base excitation matrix
9. "Acc": Recorded upper plate relative acceleration matrix.

- Taking into account the ergodicity property, samples of the matrixes "For" and "Acc" have been obtained subdividing a continuous recorded sample of 440000 elements in 11 different samples of 40000 elements each. In this way comparison among experimental and numerical results may be performed considering as initial condition for the sample *i* (with *i=2,…,11*) the final values of the sample *(i-1)*.
- Results presented in the corresponding paper have been obtained excluding the first sample, in order to consider only the stationary response of the system.
- These recorded samples have been used also for results presented in Fig. 11 of the corresponding paper.