

[Conclusion]

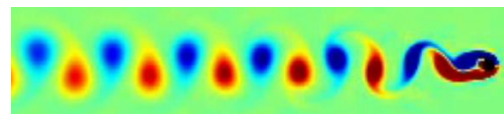
1. POD-LSE combined method

$$\int_S R_{pp}(x, x') \phi(x') dx' = \lambda \phi(x)$$

- An analysis method to investigate the relation between physical quantities and sound pressure was developed

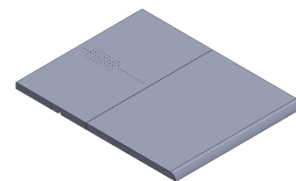
2. Preliminary experiments with a circular cylinder

- Sound and velocity field caused by Kármán vortex street could be connected adequately.



3. Relation of surface pressure & far-field sound

- Low-number dominant modes of surface pressure did not necessarily related to the radiation of far field sound



I will widely apply this method to investigate the mechanism of **broad-band sound radiation in a complicated systems**

Validation of the present method is confirmed and surface pressure mode is investigated in a step flow