**Session Title**: Flow-induced vibration energy harvesting

**Introduction**:

Flow-induced vibration (FIV) is a typical Fluid-Structure Interaction (FSI) phenomenon, which occurs in the fields of wind engineering, nuclear engineering, renewable energy engineering, ocean engineering, and so on. FIV are renewable energy resources that ubiquitously exist in our surrounding environment, which includes vortex-induced vibration, galloping, and flutter. Therefore, FIV energy harvesting holds a great potential to achieve long-lifespan self-powered operations of wireless sensor networks, wearable devices and medical implants, and thus has attracted substantial interest from both academia and industry. The piezoelectric effect or electromagnetic induction has been widely adopted to convert mechanical energy to electrical energy, duo to its high energy conversion efficiency, ease of implementation and miniaturization.

**Topics**:

* Energy-harvesting from vortex-induced vibration
* Energy-harvesting from galloping
* Energy-harvesting from other flow induced vibrations like flutter, wake induced vibration, vortex induced rotation, etc.…
* Smart Structure or controlling for harvesting energy from flow field

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