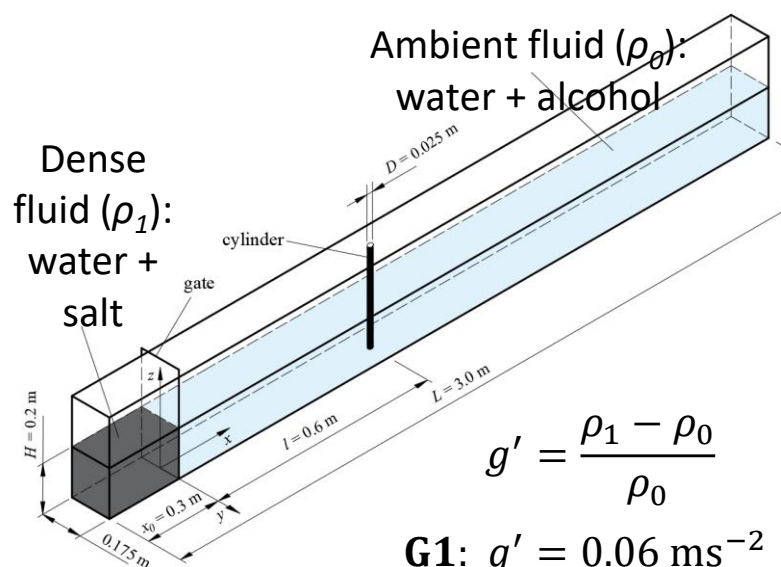


Vortex shedding by a circular cylinder in lock-exchange density current

Ana M. Ricardo, Giovanni Di Lollo, Moisés Brito, Claudia Adduce & Rui M. L. Ferreira

Experimental set-up



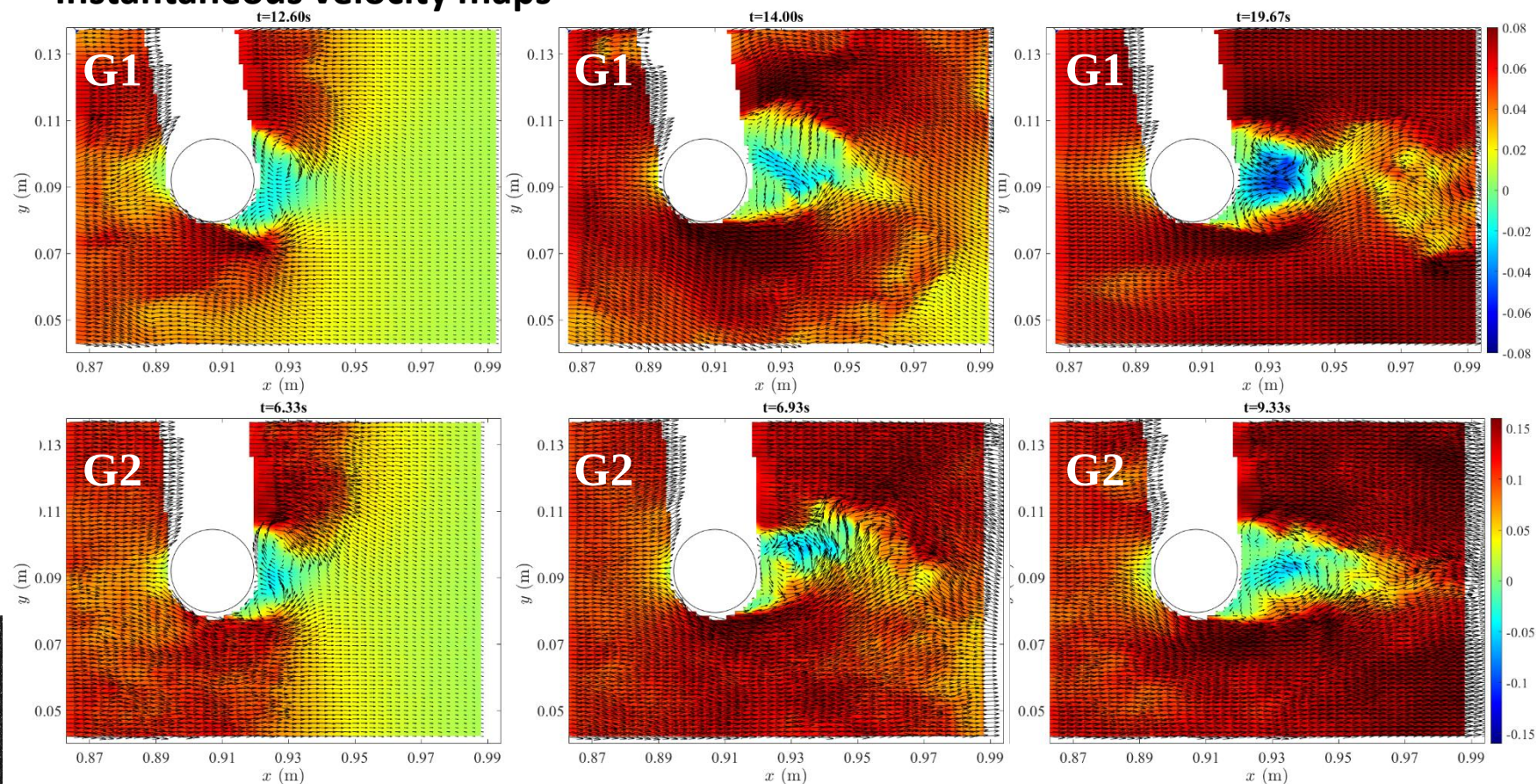
$$\mathbf{G1}: g' = 0.06\text{ ms}^{-2}$$

$$\mathbf{G2}: g' = 0.24\text{ ms}^{-2}$$

- PIV data
- Reflective index matching



Instantaneous velocity maps



- BL detachment and shear instability is initiated shortly as the current head reaches the cylinder and a pattern of well-defined symmetrical vortexes is formed;
 - As the current head engulfs the cylinder, stronger turbulence diffusion contributes to reduce vortex coherence;
 - Later the formation length increases and vortex shedding becomes periodical again;
- The Von Kármán street is frequently symmetrical rather than alternated.

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