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**Textured boundaries and their effects on ciliary locomotion**

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Tech — Many microorganisms in nature propel themselves by creating coordinated  
motion of the cilia and often interact with each other through hydrodynamic in-  
teractions. We study the behavior of these organisms near boundaries of different  
topography and rationalize the hydrodynamic effects involved. Various geometries  
like wavy, rough or solid walls are simulated using micro fabrication and their ef-  
fects on the locomotory traits are observed. Finally a comprehensive discussion on  
the effect of different boundaries on the swimming characteristics of the organism is  
presented.

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