



第236回GMSI公開セミナー／第59回CIAiSセミナー

Elastohydrodynamic flows - from elastic spreading to cell adhesion

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場所: 東京大学工学部 2号館 232号講義室



Abstract:

Soft interface dynamics is essential to a wide range of engineering applications and biological systems such as; microfluidics, 3D printing technology, heart development and intercellular adhesion. Since all of these interfaces operate in liquid environments, their dynamics is intertwined with the fluid flow. I will show some examples of flows within this class of phenomena, where the combination of mathematical modeling, numerical simulations and experiments has been used to advance our understanding of the physical mechanisms dominating the dynamics. I will discuss how the modeling of droplets, elastic sheets and adhering cells share many commonalities, and may be used to understand broader dynamical aspects of soft interfaces.

主催:

東京大学大学院工学系研究科「機械システム・イノベーション」プログラム (GMSI)
「最先端融合科学イノベーション教育研究コンソーシアム」 (CIAiS)

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