

Special Program in Applied Mathematics and Applied Mechanics

Driven passage of soft particles through constrictions and pores

2015 - 05 - 20 (Wed.)

15:00 - 18:00

308, Mathematics Research Center Building (ori. New Math. Bldg.)

Barriers such as blood vessels and cell membranes protect and separate biological organisms from the external environment. Although crossing these barriers may be difficult and energetically unfavorable, strategies to pass through these barriers are used by virus (through cell membrane) and cancer (through blood vessel). These strategies may involve exploiting field gradients (electrical or flow), inter-molecular interactions, and structural reformation. In this talk, I will introduce how these processes can be investigated through mathematical and computational modeling.



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