

MOLECULAR AND CELLULAR MECHANICS

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Key words: DNA mechanics, statistical mechanics, fluctuations, networks, membranes, cells.

ABSTRACT

This mini-symposium will be focused on problems at the intersection of mechanics, physics and biology. The emphasis will be on mechanics problems at the cellular and sub-cellular level. These problems are studied using experimental, numerical and analytical methods, often a combination of all three. Talks on all these approaches are welcome in the symposium. The topics of interest include, but are not limited to,

- (a) mechanics of DNA and proteins,
- (b) mechanics of lipid bilayers and filamentous networks,
- (c) cell adhesion and locomotion,
- (d) stochastic and active processes in cells,
- (e) electrostatics of molecules and membranes,
- (f) mechanics of cellular organelles.