



Canadian Association
of Physicists

Association canadienne
des physiciens et physiciennes

Contribution ID: 3662

Type: **Invited Speaker / Conférencier(ère) invité(e)**

(I) Soft and alive: identifying the physics questions in the biology of living cells

Monday 19 June 2023 10:45 (45 minutes)

We really understand a phenomenon in science when we can use it to make something new. This interplay between fundamental science and new materials is particularly vibrant in the highly interrelated fields of biological physics and soft materials, where a confluence of experimental techniques and theoretical approaches meet to address fundamental questions. What is a gel? How do macromolecules, such as proteins and DNA, function in the crowded and confined environment of a cell? What role do motor-driven “active” processes play in transporting material in a cell? And what role do hydrodynamic interactions (the fluid-mediated interaction between macromolecules) play? I will try to paint a picture that motivates these questions.

Keyword-1

soft materials

Keyword-2

living cells

Keyword-3

Author: YETHIRAJ, Anand

Presenter: YETHIRAJ, Anand

Session Classification: (DPMB) M1-3 DPMB 101 I DPMB 101 (DPMB)

Track Classification: Technical Sessions / Sessions techniques: Physics in Medicine and Biology / Physique en médecine et en biologie (DPMB-DPMB)