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5th. European Conference on Computational Mechanics (ECCM V)
6th. European Conference on Computational Fluid Dynamics (ECFD VI)

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Computational cell mechanics

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The field of Cell Mechanics aims at investigating how cells sense external mechanical and/or biochemical signals and potentially generate internal forces and/or biochemical signals in response to them. In order to better understand these processes, different computational approaches describing the mechanics of living cells have been proposed. We propose here a minisymposium aiming at gathering the different experts of the field together to share their own research. Potential applications include migration, proliferation, tissue production, differentiation, and thus, phenomena of primordial importance to the biological and medical communities such as cell reprogramming, disease evolution, etc. The computational techniques will range from the smallest scale (DFT, MD, etc.) up to the continuum scale (e.g. small networks).