Helices in Fluids and Applications to Modelling in Biology

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There many and varied biologically relevant situations which involve long slender bodies (e.g. worms, flagella, bacterial bodies, etc.). It is therefore important to understand Low Reynolds number fluid dynamics and interactions of the organisms body or flagella. Here I will be touching on applications of the method of regularized stokeslets to moving bodies in fluids. These models have applications to the study of locomotion as well as fluid mixing.