Statisztikus Fizika Szemináriumok

2019. október 16.
szerda, 11.00
ELTE TTK Északi Tömb 2.54

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The effect of intermittent upwelling events on plankton blooms

The larger scale the ocean's hydrodynamic flow is characterized by the presence of large eddies (vortices), which play a very important role in phytoplankton ecosystems. Another important large scale phenomenon is upwelling, which brings a load of nutrients to the surface, sometimes triggering algal blooms. We investigate the effect of intermittent upwelling on the biological community in the presence of large eddies formed in the wake of an island. We use a theoretical model of this system by coupling a kinematic flow field to a population dynamical model for plankton growth. We observe plankton blooms when nutrients are trapped by vortices, and analyse how this dynamics depends on the timing and intensity of upwelling events.

1117. Budapest, Pázmány Péter sétány 1/A (Északi tömb)
2.54-es szoba
http://glu.elte.hu/~statfiz/index.html
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