Small-scale biological, physical and chemical signals in the sea

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Plankton operate at low to intermediate Reynolds numbers, generating watery signals that can be attenuated by viscosity and confused with small-scale turbulence. Yet messages are created, transmitted, perceived and recognized. These messages guide essential survival tasks of aquatic micro crustaceans. Cues created include those of escaping prey, lunging predators, attractive mates, and appropriate hosts. In this presentation, I describe some unusual and some typical examples of small-scale biological-physical-chemical signals in the sea that help to maintain the integrity of our aquatic ecosystems.