Abstract Submitted
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Optimal Foraging Strategy: Angle Matters[1] UDO ERDMANN, SEBASTIAN GÖLLER, IGOR M. SOKOLOV, LUTZ SCHIMANSKY-GEIER, Insitut für Physik, Humboldt-Universität zu Berlin — We report a theory to describe the motion of zooplankton. In contrast to move just randomly like a classical Brownian particle, zooplankters like Daphnia or Copepods pick their turning angle from a distribution which is far from being Gaussian or equally distributed. This leads to different behavior in the motion compared to normal diffusion. The question which can be asked here is: Is there an evolutionary reason to forage for food in the aforementioned manner? The talk is planned to give an answer into that direction.

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