

Biomathematics Seminar  
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## **From individual to collective behaviour of unicellular organisms**

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The movement of unicellular organisms can be also viewed as a stochastic process - a biased random walk. Examples include chemotaxis of bacteria or amoeboid cells and in both cases, cells detect extracellular signals (attractants or repellents) and alter their behaviour accordingly. In this talk, we will discuss the derivation of macroscopic PDEs (collective behaviour) from individual based models of unicellular organisms.