Rheology of Active Magnetic Suspensions

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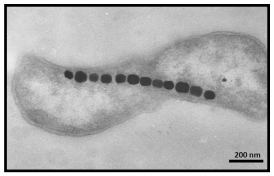
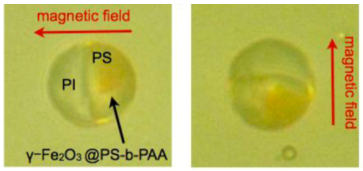
Active magnetic suspensions ?



(Chen *et al.*, 2010)

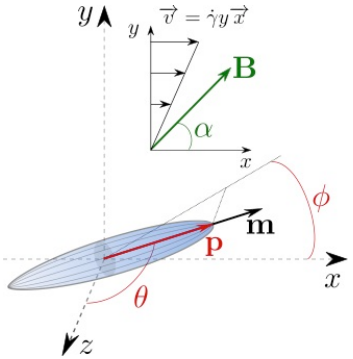
Magnetotactic bacteria



(Yabu *et al.*, 2013)

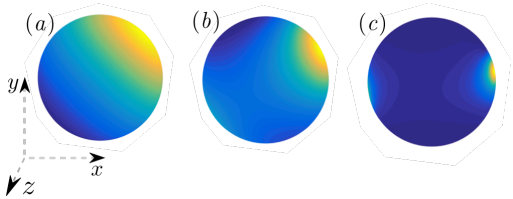
Magnetic Janus particles

3D model of dilute suspension of active magnetic rods



Orientation distribution in a simple shear flow

$$\nabla_s(\dot{\mathbf{p}}\Psi) = D_r \nabla_s^2 \Psi$$



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Stress contibutions at low Pe_H : emergence of *break* and *motor* states