

Global existence in a chemotaxis-Navier-Stokes system
with chemotactic sensitivity tensor and porous medium
diffusion

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In this talk, we deal with a degenerate chemotaxis-Navier-Stokes system with chemotactic sensitivity tensor on the bounded domain in 2D. As to the known results (the system without rotation), Tao-Winkler (2012) proved global boundedness in a chemotaxis-Stokes system with porous medium diffusion, and Winkler (2012, 2014) proved global existence and stabilization in a chemotaxis-Navier-Stokes system with linear diffusion. This talk will give global-in-time existence of weak solutions to a chemotaxis-Navier-Stokes system with chemotactic sensitivity tensor and porous medium diffusion.