1117-65-53 Seong Jun Kim^{*} (skim396@math.gatech.edu), 686 Cherry Street, Atlanta, GA 30332, and Sung Ha Kang and Haomin Zhou. A computational strategy for optimal path planning with limited sensing ability.

In applications, the optimal solution is extremely important because it directly impacts the efficiency of allocated resources. This talk focuses on establishing a numerical method for path planning problems under limited sensing ability which arises as an essential part in many scientific fields, e.g., robotic path planning, unmanned automatic vehicles. We formulate the problem using the level set framework and find the solution using an optimization method with SDEs. (Received December 28, 2015)