

第256回

物質科学セミナー

題名 : Artificial Life and Liquid Robots

(要素-システム研究プロジェクトセミナーとの共催)

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日時 : 2019 年 11 月 14 日 (木) 16:20 – 17:50

場所 : 総合科学部 J205

講演要旨 :

Artificial life is a very interdisciplinary field investigating artificial systems that exhibit the behavioral characteristics of natural living systems. Our ambition is to create a system that will at least partly mimic cell behavior. We focus on the investigation of organic droplets in the presence of aqueous solutions of surfactants. We have found that in a similar way to living cells, these droplets are able to perform chemotactic movements in concentration gradients of chemoattractants, change their shape or behave collectively. Recently we proposed to call such droplets with life-like behaviour “liquid robots”. The relation of liquid robots to the origin of the word “robot” will also be discussed (because the one hundred year anniversary of the word robot, which comes from Czech, is approaching).

5 研究科共同セミナーの認定科目です

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