

MIMS/CMMA Seminar on Self - Organization

第5回 自己組織化セミナー

2014年5月23日(金) 17:30~18:30

明治大学中野キャンパス 6階 研究セミナー室 3

植物の葉序とオーキシンの流れ

Phyllotaxis and auxin flow in plants

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Abstract

In higher plants, leaves and flowers are arranged around stems at a particular angle with each other. The pattern exhibited by organs is called phyllotaxis. Many botanists and mathematicians have been fascinated by phyllotaxis and tried to understand the principle behind this dynamical geometric system. Various mathematical models have been proposed and a number of experimental data accumulated. Recently, molecular biological approaches reveal the importance of phytohormone auxin flow in phyllotaxis. We took an experimental approach to investigate the role of auxin flow in organ formation. As a result, we identified several key genes in this pathway and uncovered their molecular functions. Based on our data, we are now beginning the construction of a mathematical model to explain the principle of auxin-regulated organ formation. In this talk, our recent findings will be presented and the possibility of our ongoing model will be discussed compared to previous ones.

参加自由です。皆様のお越しをお待ちしております。

・中野キャンパスへのアクセス

JR中央線快速・総武線、東京メトロ東西線／中野駅 下車 北口より徒歩約8分

詳しくは、http://www.meiji.ac.jp/koho/campus_guide/nakano/access.html

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