ASHBi SEMINAR

Clock, wave, bifurcation : how to model vertebrate segmentation

Lecturer: Paul François, Ph.D. Professor, University of Montreal





*Register via the right QR code

Abstract

A global genetic oscillator, the 'segmentation clock', controls vertebrate segmentation. In my talk, I will describe in simple terms how methods and concepts from non-linear physics can be used to probe and understand the dynamics of such oscillator. I will describe experimental results on entrainment and coupling of segmentation oscillators (in collaboration with Alexander Aulehla), revealing alternative models, compatible with pulsatile clocks and labile period which can be further be characterized mathematically and quantified experimentally.

Organizer : Graduate School of Medicine Institute for the Advanced Study of Human Biology (WPI-ASHBi)



Contact: Prof. Cantas Alev [E-mail] alev.cantas.8m@kyoto-u.ac.jp