

EMBO Global Lecture Series

with **Eva Benkova**Institute of Science and
Technology Austria (ISTA)



Hormonal regulation of plant development: auxin and cytokinin cross-talk and beyond

9 July 2024

National Institute for Basic Biology (NIBB), Okazaki Seminar room - 111

semmar room – 11. 10:30 am

Auxin and cytokinin are key hormonal orchestrators of root system architecture and its developmental plasticity. In the past, we have identified several convergence points and pathways that might integrate auxin and cytokinin hormonal inputs to coordinate root organ development. Intriguingly, some of these recently identified molecular components seem to exceed their simple function in the auxin-cytokinin cross-talk, and they provide functional links with other regulatory pathways, for instance, by a mediating perception of environmental stimuli, such as abiotic stress, nitrate availability, or by controlling the trafficking. insights subcellular Our into mechanisms integrating these auxin and cytokinin regulatory pathways into complex molecular networks that coordinate plant growth and its flexibility to varying external inputs will be discussed.

