

## **Integrodifference equations in Ecology**

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Integrodifference equations (IDEs) are spatially explicit models commonly used to study population dynamics with seasonally synchronized life stages. In its simplest form, IDE reflects temporally separate phases of growth and dispersion. Among the earliest uses of IDEs are modeling gene flow in a spatially structured population and biological invasion. Since then, numerous works have made it possible to better understand the qualitative behavior of IDEs and their link with ecological contexts. In this talk, we discuss developments and challenges in using IDEs to model ecological systems.