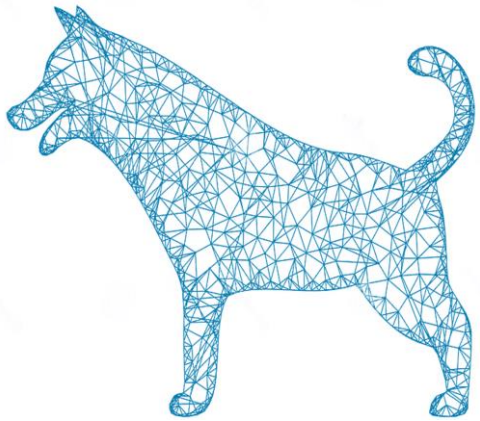
Spatiotemporal
Nonlocal
And
Non-conservative
Diffusion
On
Graphs



Funding agency:

Program: Proyectos de Generación de Conocimiento 2023

Dates: 2023-2026

Type of project: Individual

Presupuesto TOTAL concedido	58.625,00
Nº Contrat. PREDOC. (1)	1

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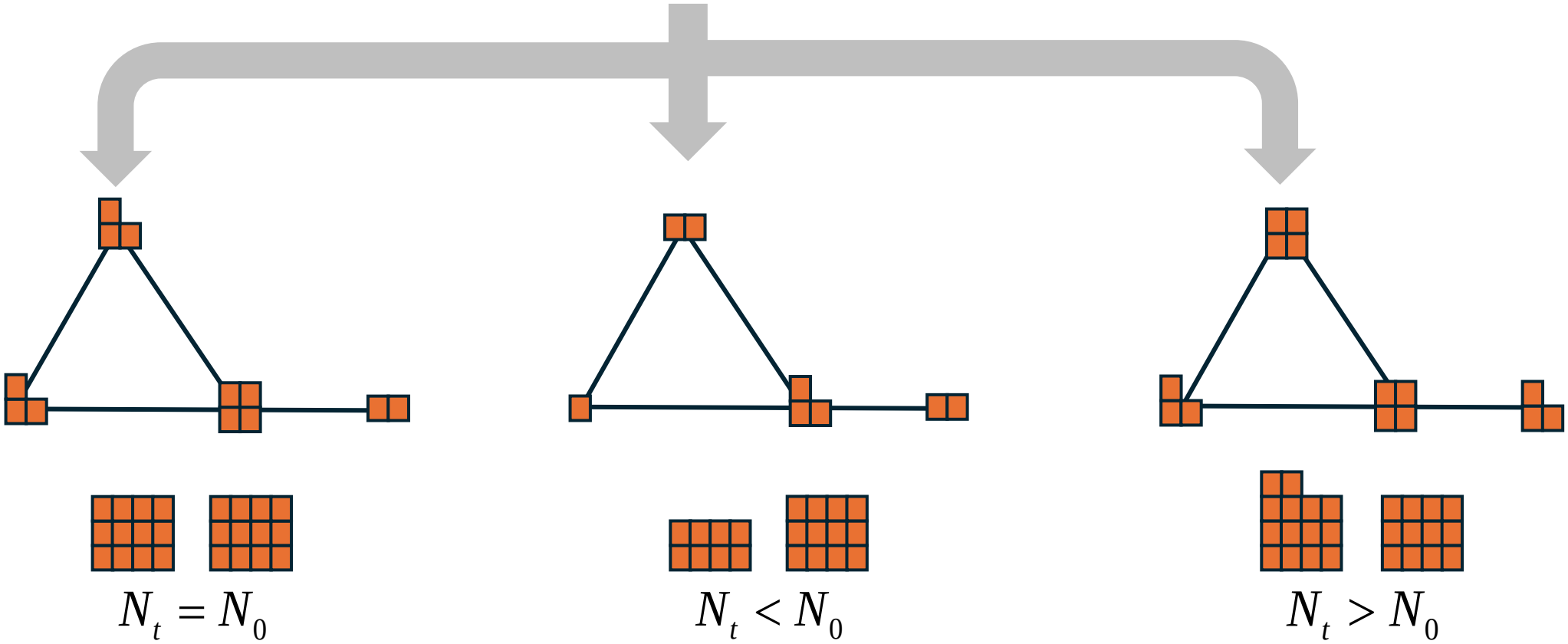
$t = 0$

$N(0) = N_0 \in \mathbb{R}^{n \times 1}$



$t > 0$

$N_t = N_0$

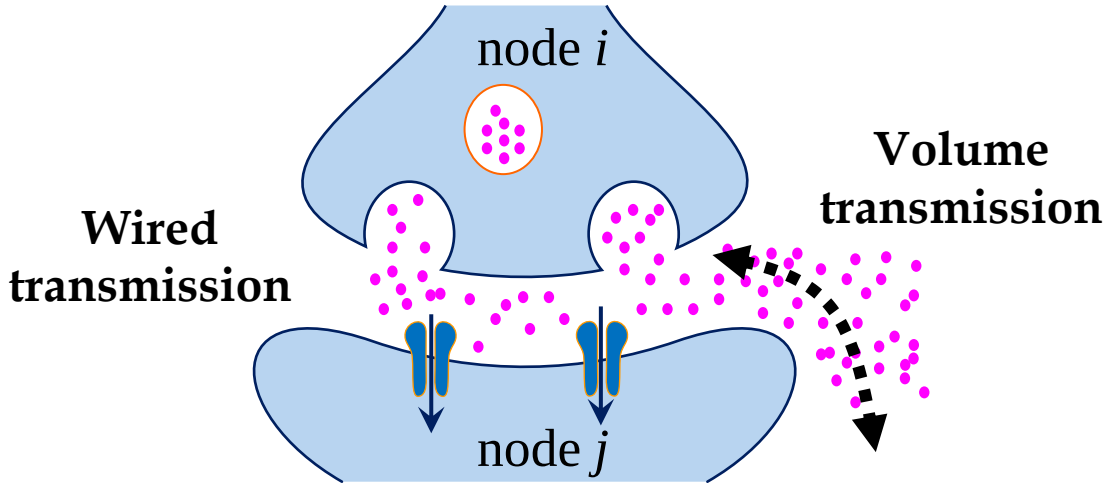
$N_t < N_0$

$N_t > N_0$

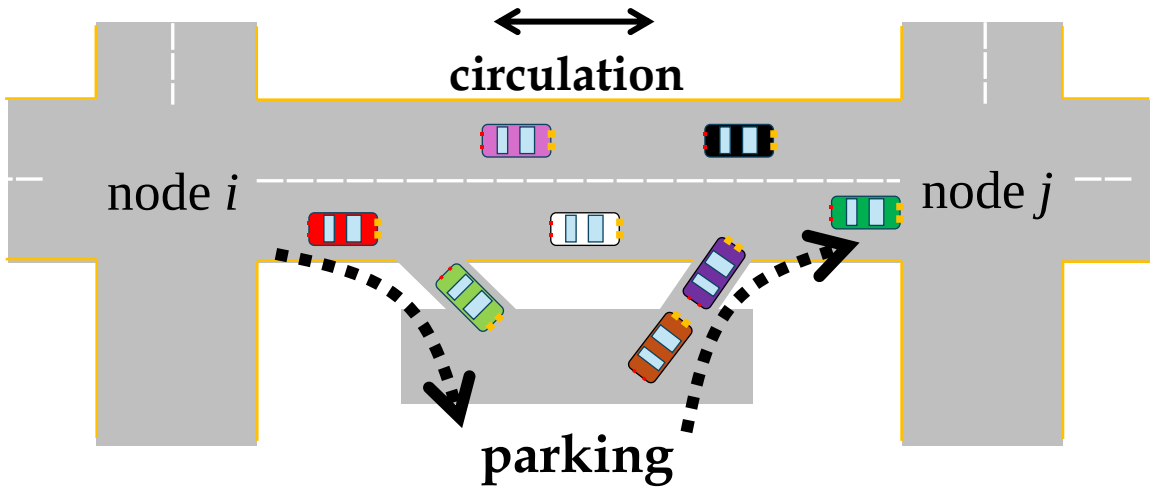
CONSERVATIVE

NON-CONSERVATIVE

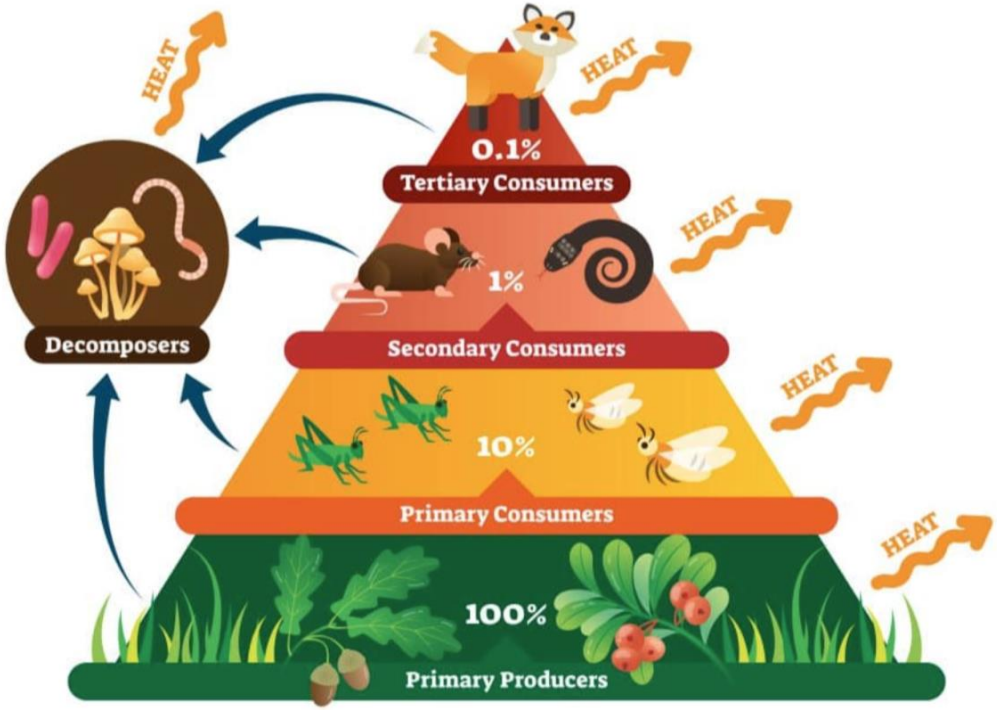
Chemical synapsis



Urban traffic



Trophic webs



1. Developing logistic NC diffusion models on graphs/networks.
2. Introducing spatial nonlocality in NC diffusion on graphs/networks.
3. Introducing temporal nonlocality (memory) in NC diffusion on graphs/networks.
4. Studying generalized time-and-space nonlocal NC diffusion on graphs/networks.
5. Studying the induced geometries of generalized NC diffusions on graphs/networks.