

“Temporal network-based analysis of turbulent mixing”

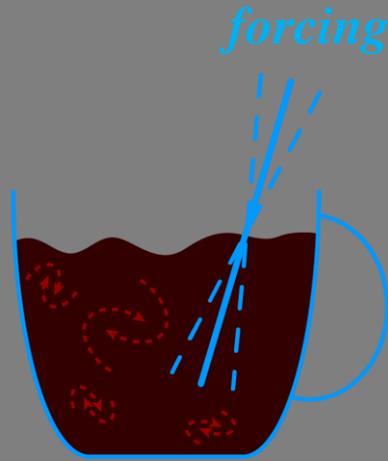
Giovanni Iacobello, Stefania Scarsoglio, Hans Kuerten, Luca Ridolfi



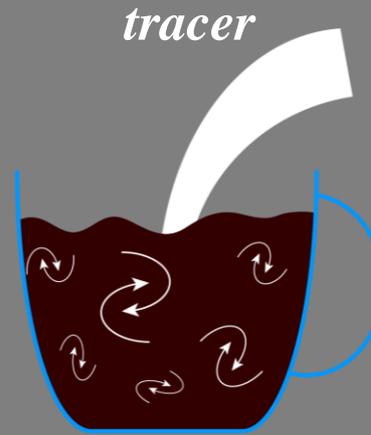
Politecnico di Torino (Turin), Italy
Department of Mechanical and
Aerospace Engineering



COMPLEX
NETWORKS



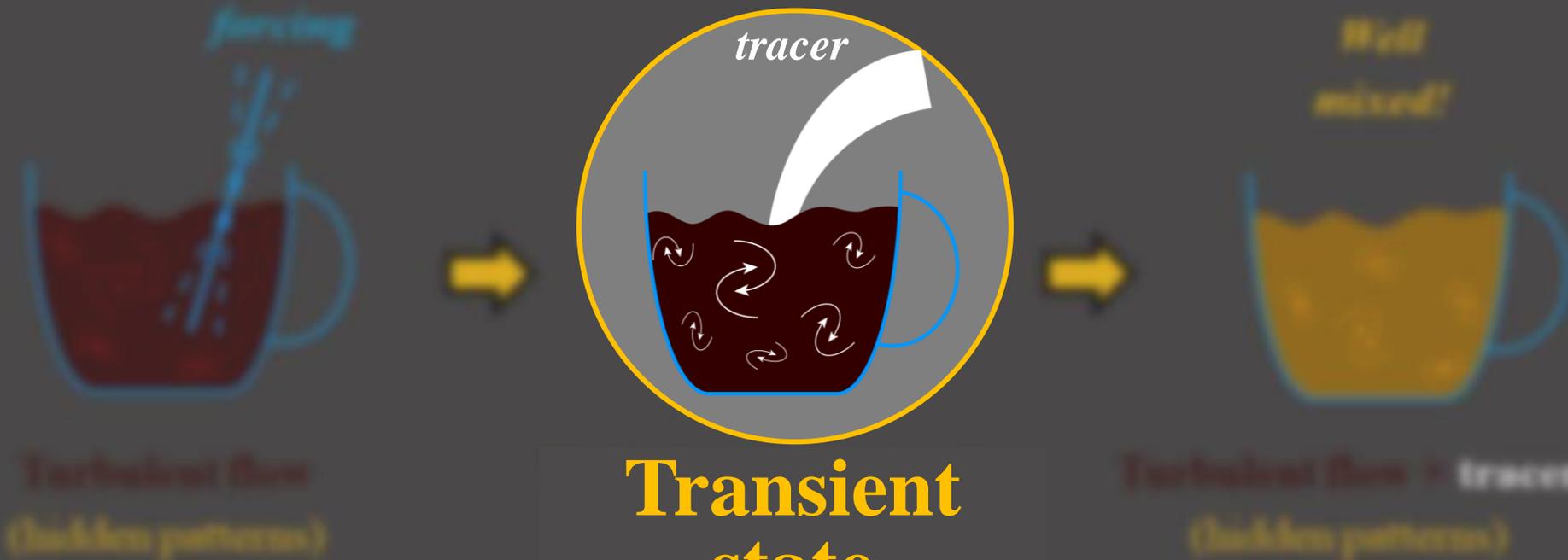
Turbulent flow
(hidden patterns)



Turbulent flow + tracer
(visible patterns)



Turbulent flow + tracer
(hidden patterns)



UNPREDICTABLE
(Turbulence)



Riverine mixing^{*}

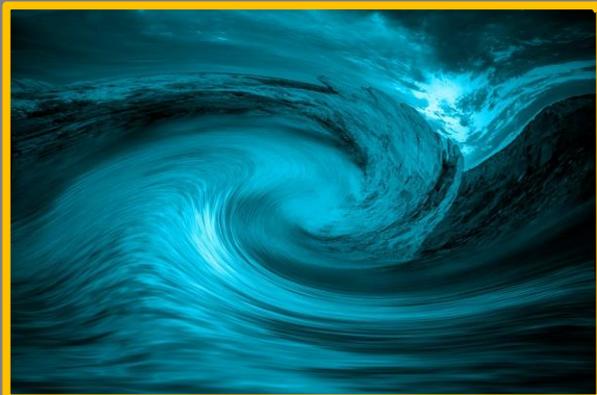


Atmospheric dispersion[§]



Applications

Ocean mixing[†]



Biophysical dynamics[‡]



^{*} www.amazon-of-europe.com

[†] kai Stachowiak (publicdomainpictures.net)

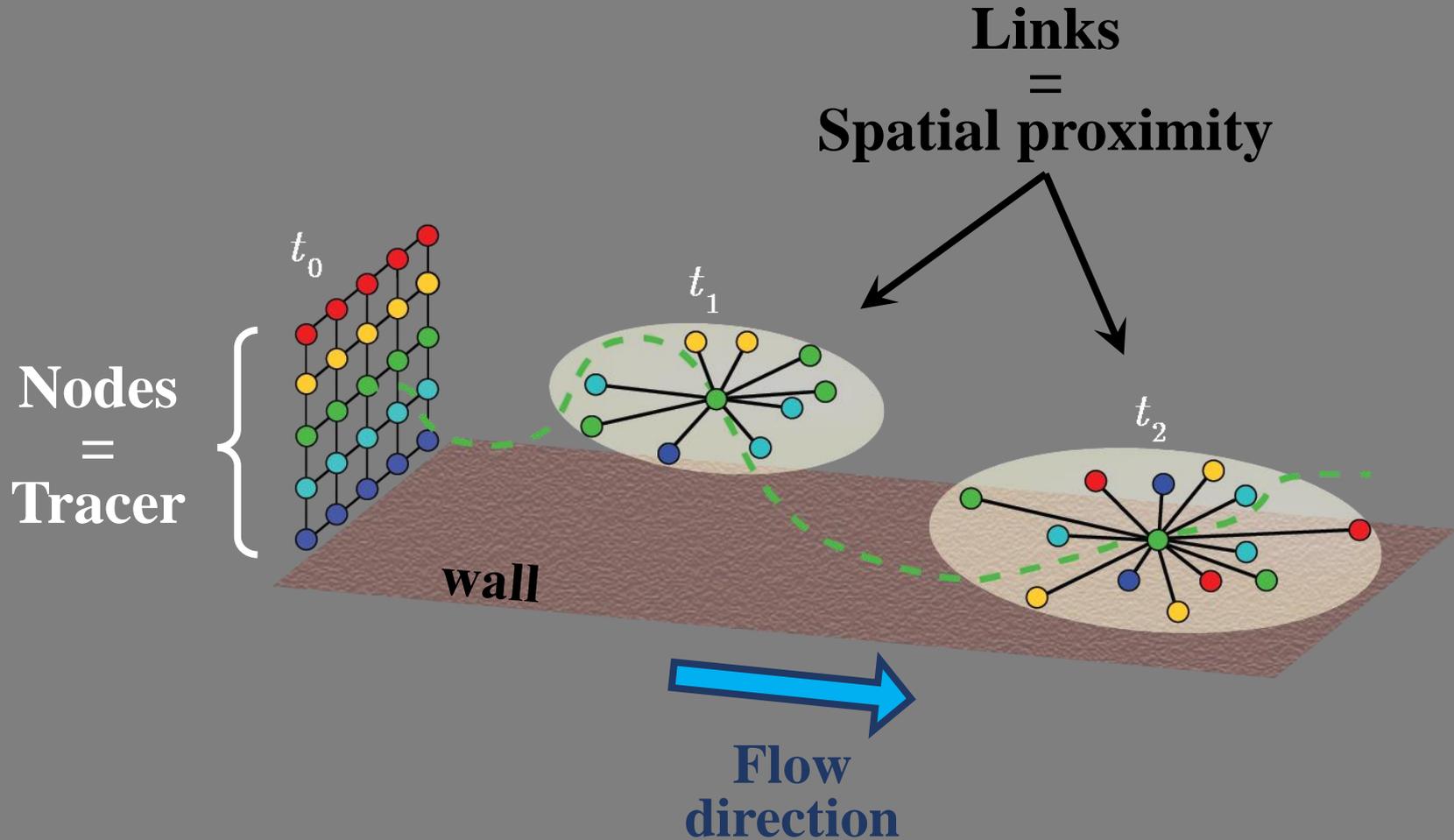
[§] Unknown author, CC BY licence

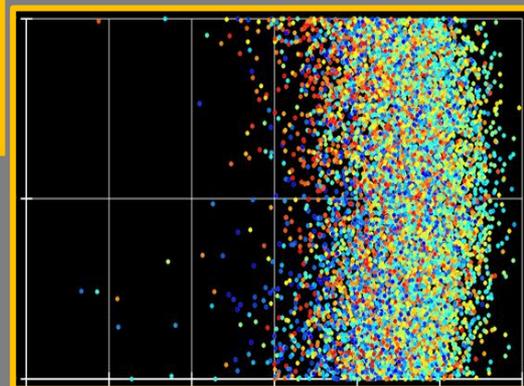
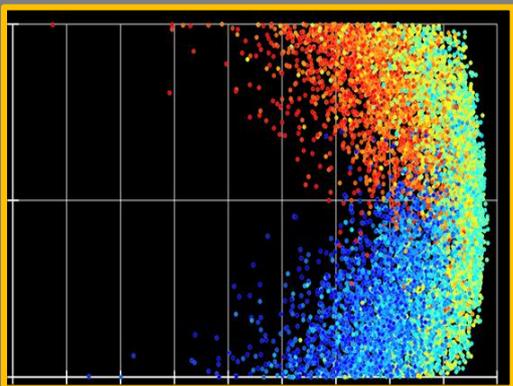
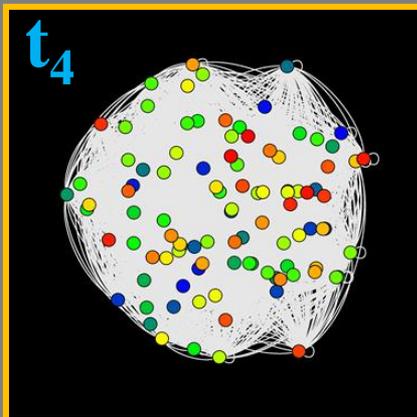
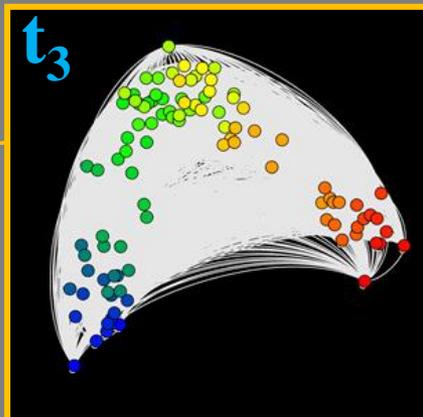
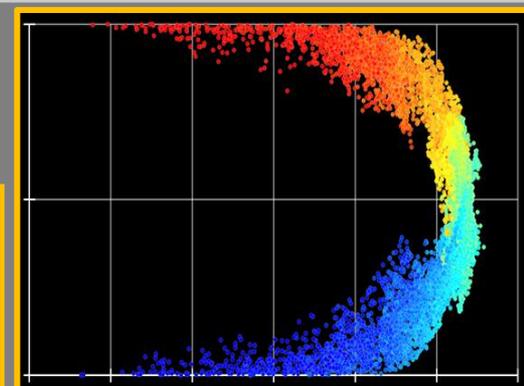
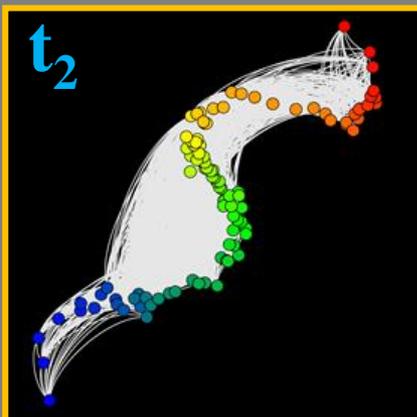
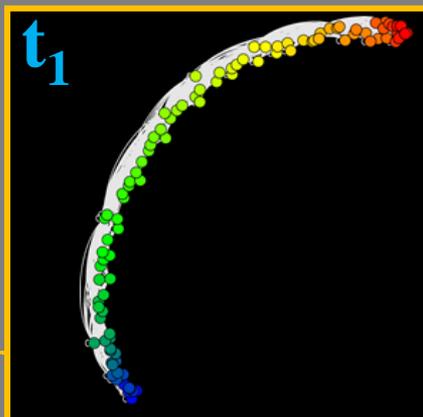
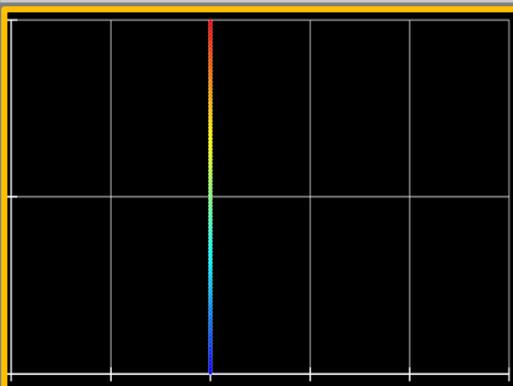
[‡] ScienceNews, Vol. 193, No. 8, May 12, 2018, p. 16

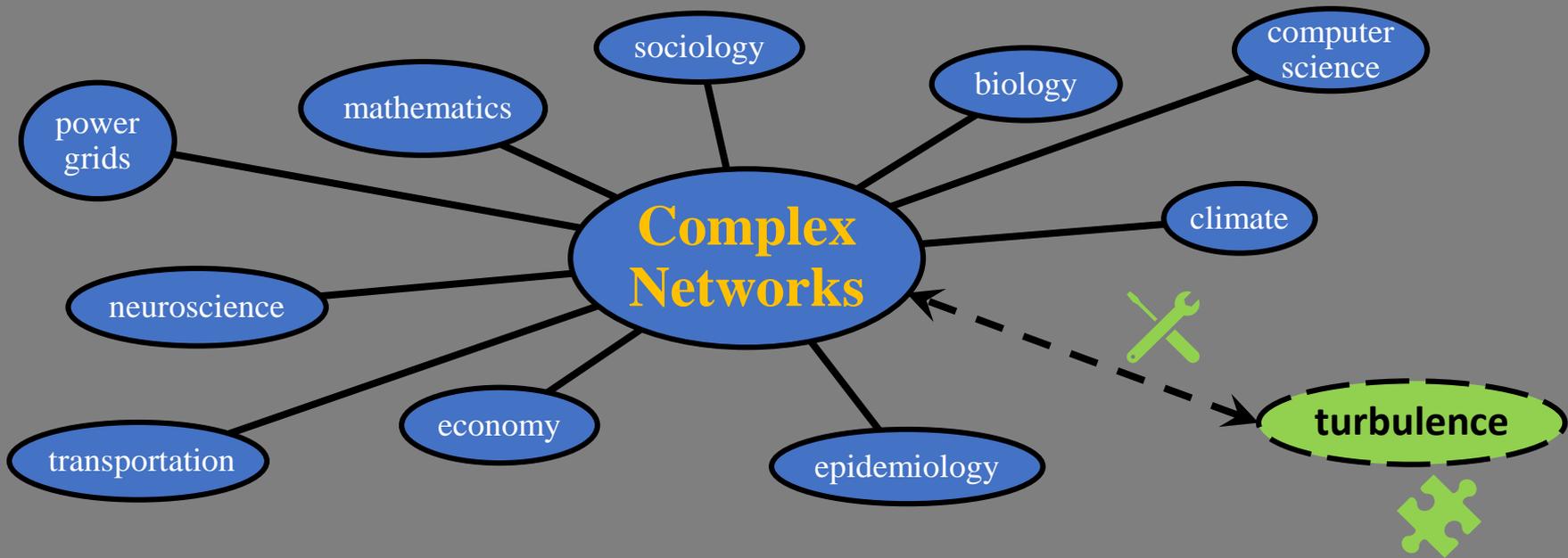


Turbulent channel flow

(model for mixing and dispersion in rivers, atmosphere, ...)







Questions + info? *Please contact me:*



Coffee break



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ResearchGate



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