A multi-dimensional percolation approach to characterize sustainable mega-city regions

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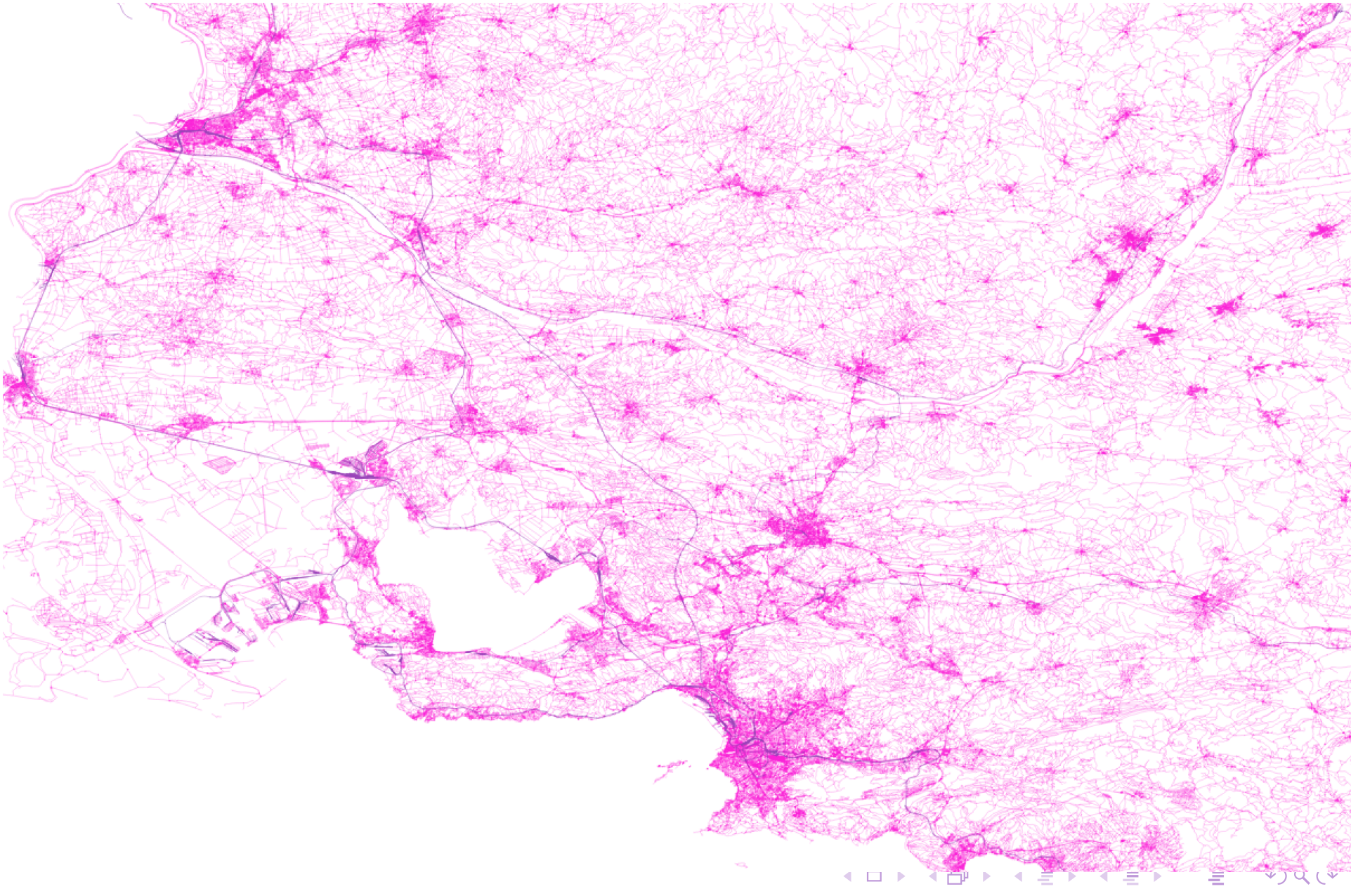
Networks and territories



Characterizing Road networks

Network percolation

Multidimensional percolation

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Research objective :

Formalization

Empirical data and variables

Experience plan

Results: endogenous mega-regions

Characterizing sustainibility

Results: Pareto fronts

Extrapolating transportation flows

Calibration

Discussion

Implications

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Developments

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Conclusion

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Related works

Raimbault, J. (2018). Calibration of a density-based model of urban morphogenesis. PloS one, 13(9), e0203516.

Raimbault, J. (2018). An Urban Morphogenesis Model Capturing Interactions between Networks and Territories. *Forthcoming in Mathematics or Urban Morphogenesis.* arXiv:1805.05195.

Raimbault, J. (2018). Caractérisation et modélisation de la co-évolution des réseaux de transport et des territoires (Doctoral dissertation, Université Paris 7 Denis Diderot). `https://halshs.archives-ouvertes.fr/tel-01857741`

Open repository at `https://github.com/JusteRaimbault/UrbanMorphology`

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References I