

Human mobility with a bounded memory

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We propose a model of mobility considering exploration to new places and revisit to a limited number of frequent places.

Urban life is busy. People visit places with selection. Existing model has shown that a small fraction of destinations cover most of citizen's time spent. In the meantime, new sites of cities are built over time, bringing people to better choices to visit, i.e., the set of one's destinations are substitutive[2].

- [1] Campos D, Méndez V. Recurrence time correlations in random walks with preferential relocation to visited places. *Physical Review E*, 2019, 99(6): 062137.
- [2] Jin, C., Song, C., Bjelland, J. et al. Emergence of scaling in complex substitutive systems. *Nat Hum Behav* 3, 837–846 (2019) doi:10.1038/s41562-019-0638-y

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