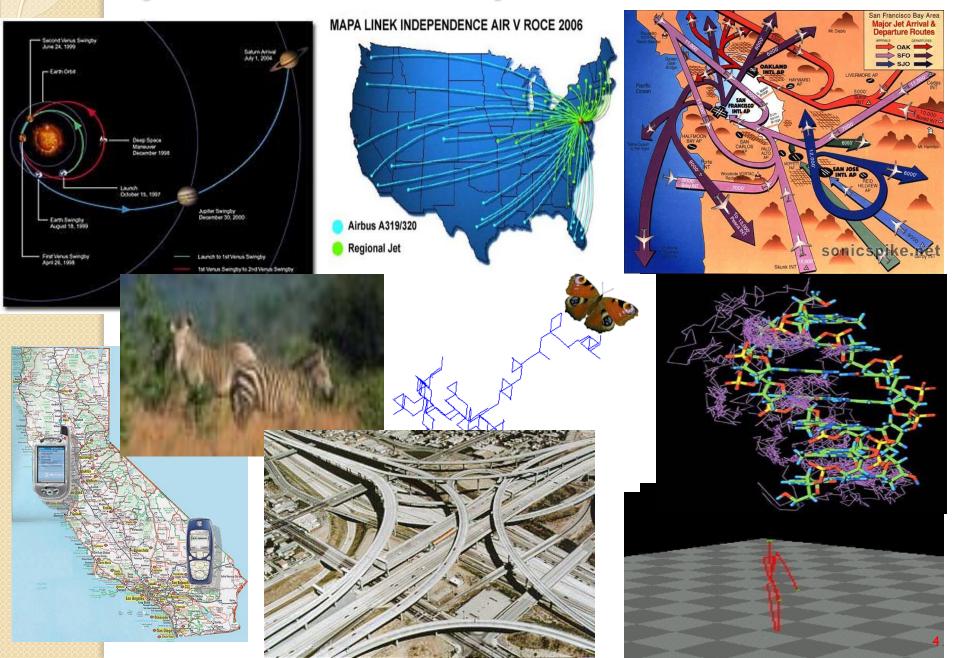
Hurricanes in Texas and Florida; Fires in California and Wyoming

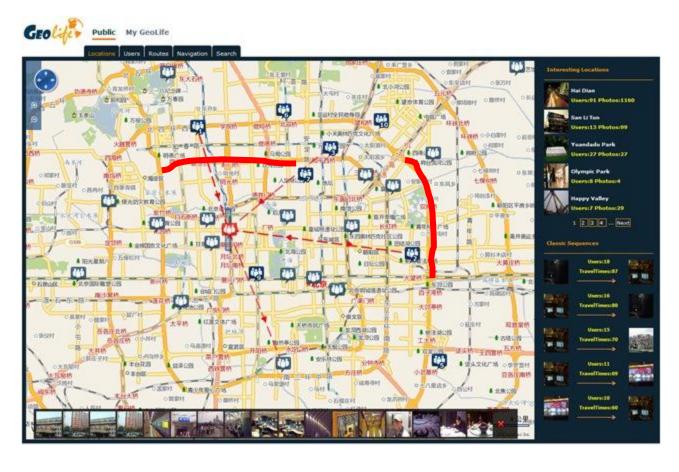
• What does it mean to say that they have <u>similar motions</u>?



Trajectories are everywhere



- Plethora of Application Domains:
 - Traffic Management



Retrieve all the ambulances which had similar delays patterns during the rush hours in the last 6 months



Plethora of Application Domains:

Video analysis





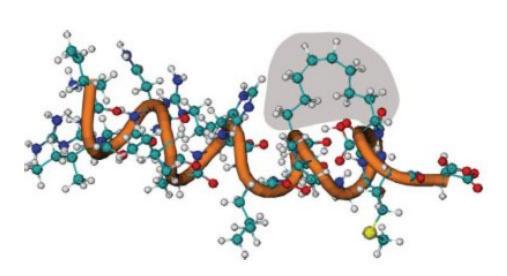




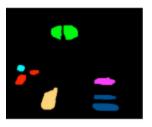
Abnormal events detection; Counting Pedestrians (based on similar trajectories clustering)

Introduction/Motivation

- Plethora of Application Domains:
 - Molecular Design



Are there any similar distributions in the molecular dynamics trajectories?





Are the motions of (sets of) cells similar?

- Plethora of Application Domains:
 - "Signature" of Human Motions



Are there any descriptive invariants that can be deduced from the trajectory signature?

Can they be attributed to the computational locality of the motion components?

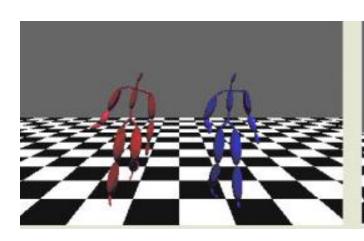


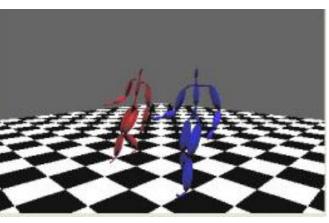
Introduction/Motivation

- Plethora of Application Domains:
 - Similarity of Human Motion

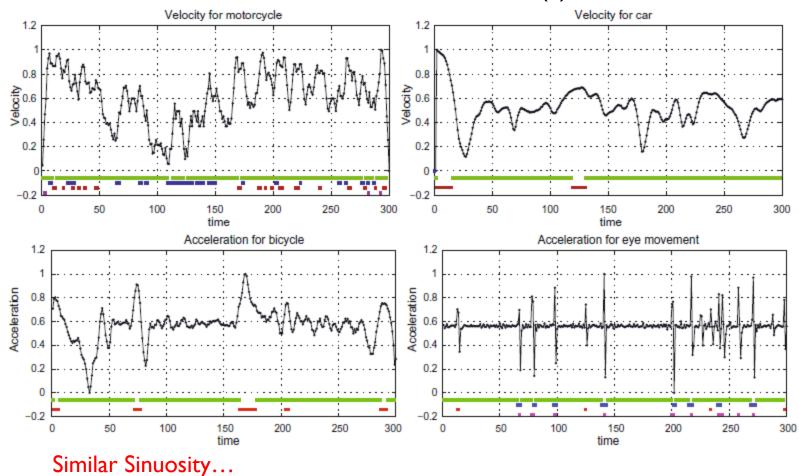


What does it mean to say that two motions are perceptually-similar?





- Plethora of Application Domains:
 - Similarity of Motions in Different Contexts what should we use as a "measure" (?)



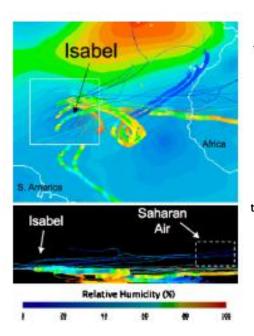
EDBT 2012, Berlin

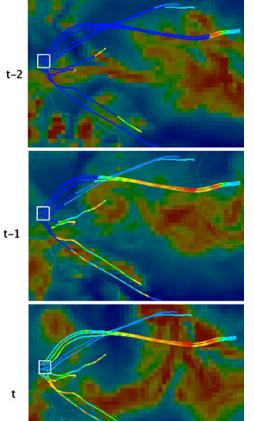
- Plethora of Application Domains
 - Smart Phones tracking (twist of privacy)











- Similarity of Meteorological Phenomena
 - Humidity tracking



