

# Behaviour analysis: social groups and goals

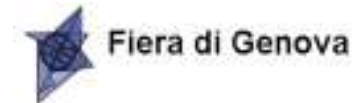
David Hogg, University of Leeds

Genova, 28<sup>th</sup> September 2011



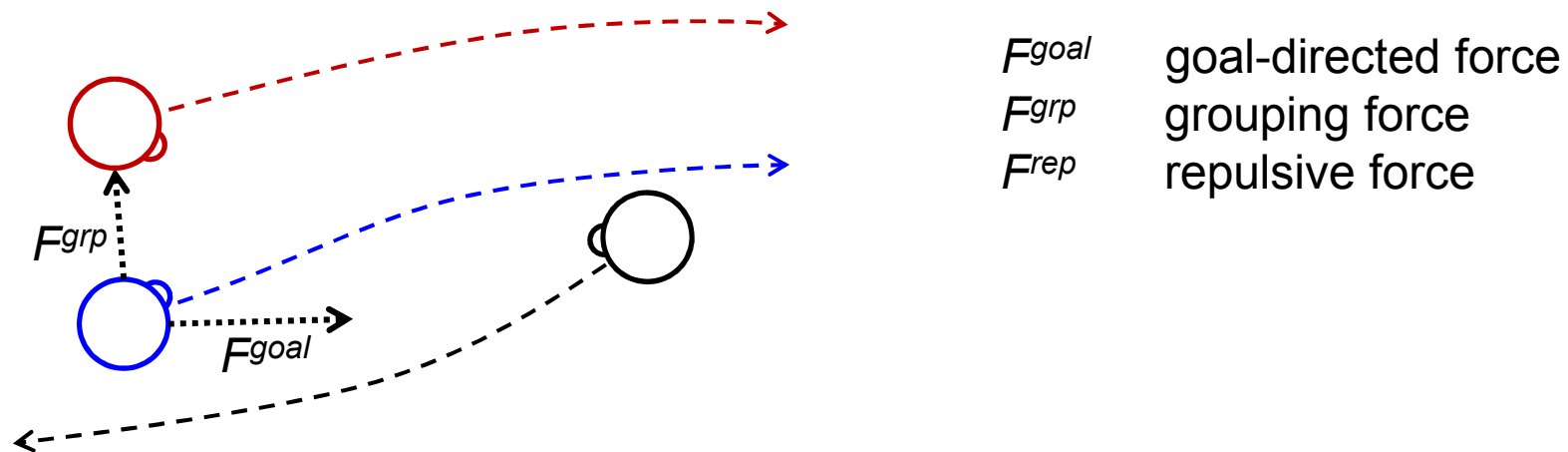
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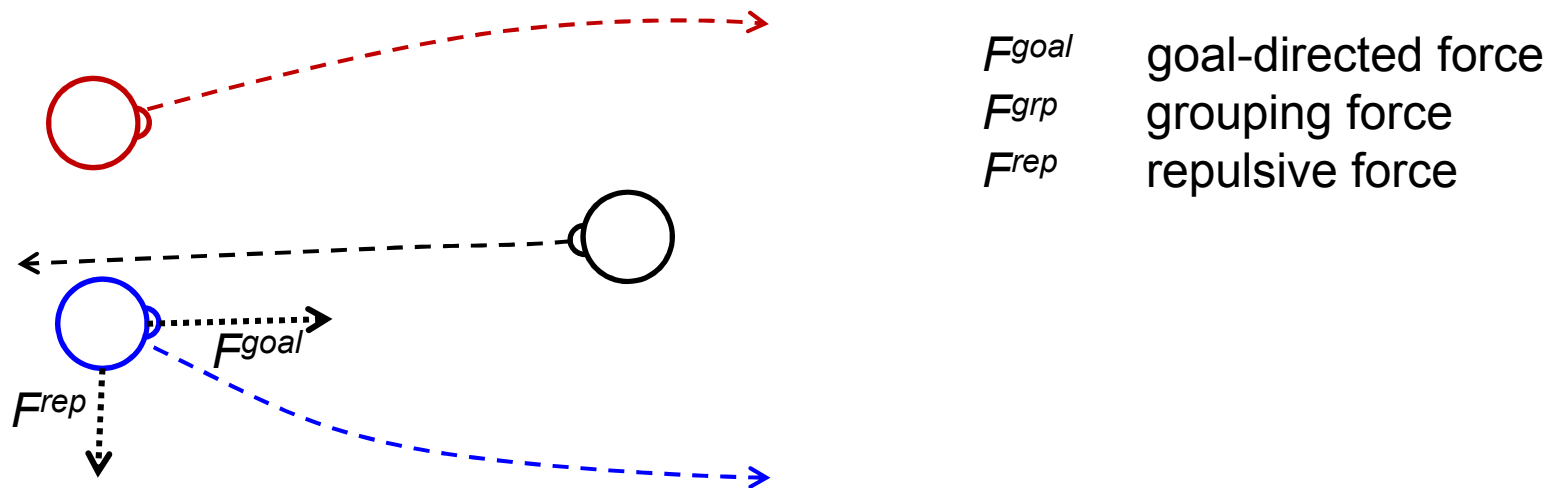


By inference from a *Social Force Model*

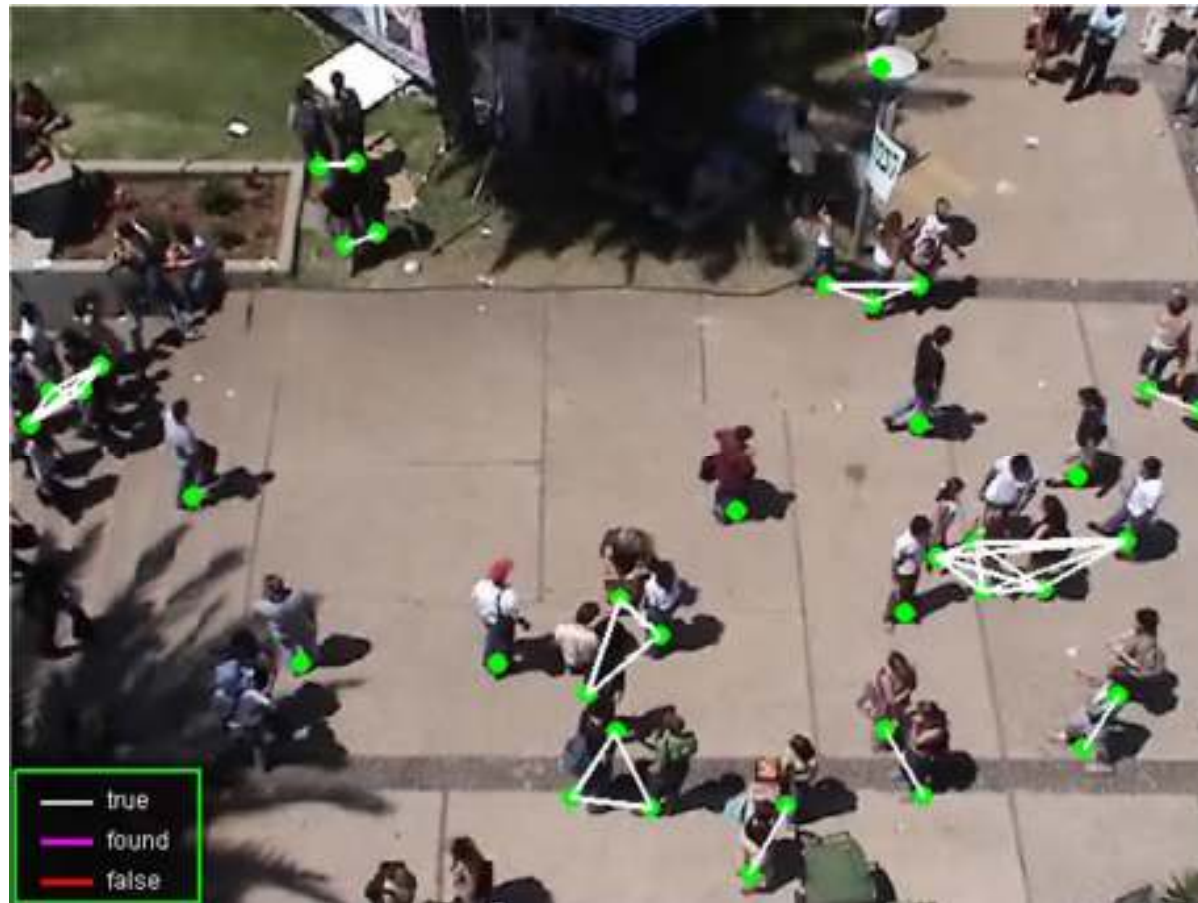


Sochman and Hogg, SISIM, Nov 2011

By inference from a *Social Force Model*



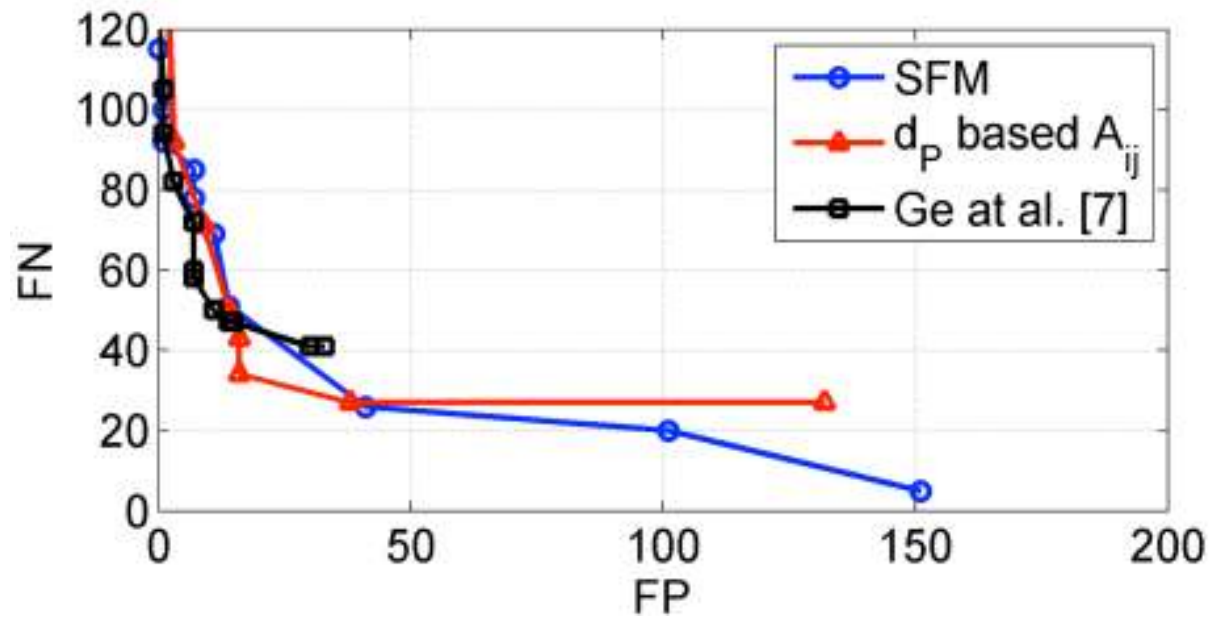
Sochman and Hogg, SISIM, Nov 2011



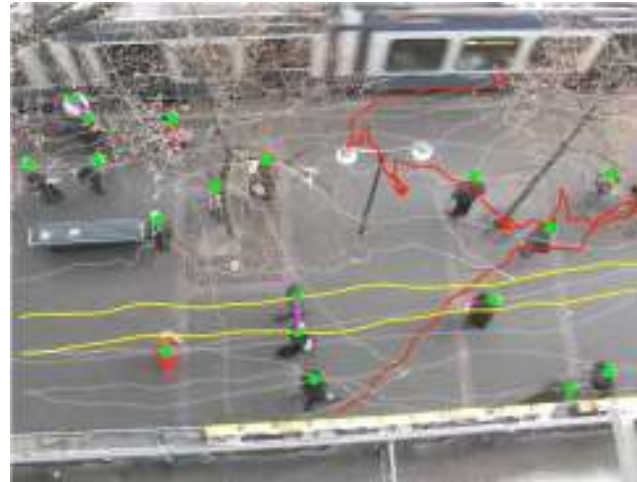
# Grouping experiments – ETH dataset



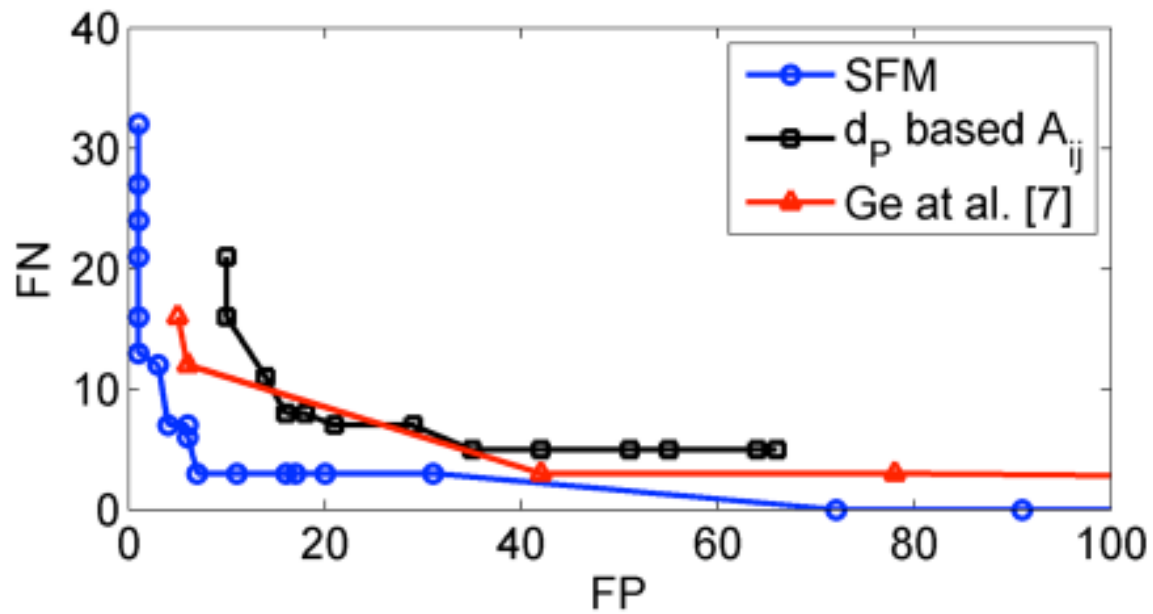
8m 40s  
386 individuals  
81 groups



# Grouping experiments – *Hotel* dataset



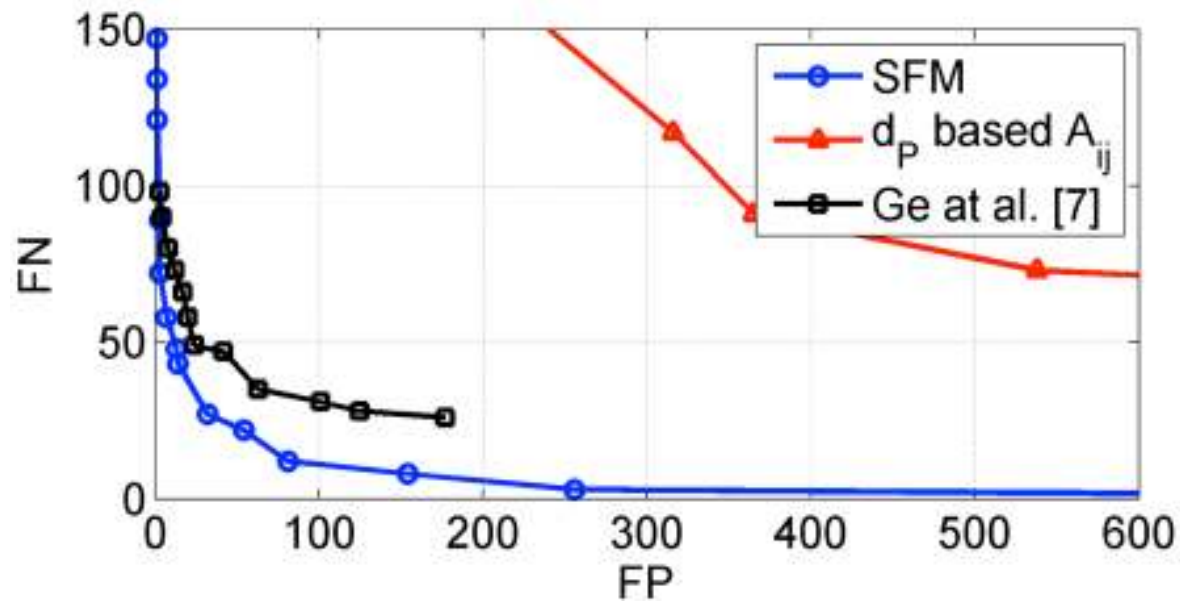
7m 23s  
287 individuals  
55 groups



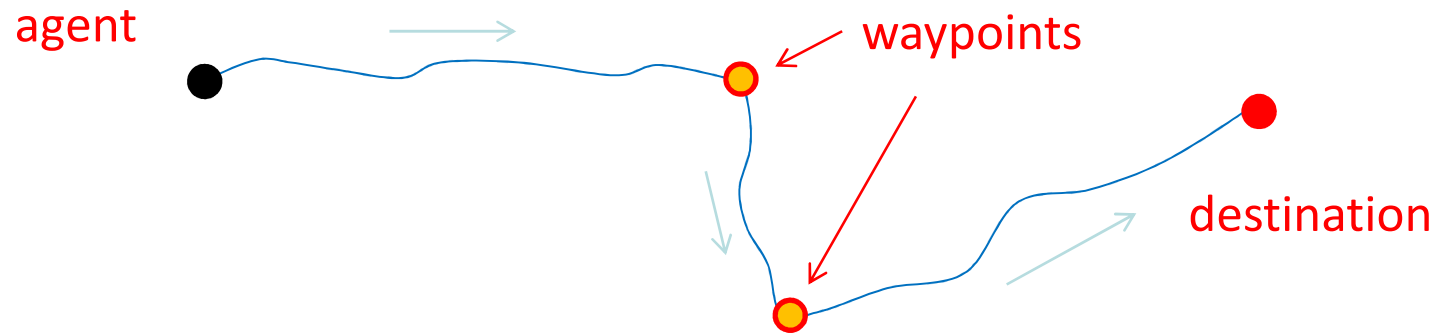
# Grouping experiments – *Students* dataset



3m 40s  
417 individuals  
112 groups



# Destinations



## Assumptions:

- At all times, people are navigating towards some destination
- Pre-defined destinations and waypoints
- People aim at waypoints with random perturbations
- The transitions between waypoints are Markov

