Title:	Modelling Heterogeneous Traffic in Disordered
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Abstract:	We propose a microscopic agent based model aimed at modelling traffic in a hetero- geneous disordered systems. We utilize the ideas from porous flow approach and the first order collision-free speed model for pedestrians to define a new model for vehicles. The direction model for pedestrians (assumed as discs) is extended to vehicles (assumed as rect- angles) by covering the rectangle by disc of diameter same as the width of the vehicle and taking the weighted vector sum of directions from each discs. Similar idea is used to de- termine speed based on the closest vehicle in front (in the given direction). The idea of dynamic parameter setting for the subject vehicle such as desired speed and time gap is also proposed. The values are decided based on the congestion condition and pore space distribution in the scanning area surrounding the subject vehicle.
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