

**Läsåret 07/08****SG1108 Tillämpad fysik, mekanik, 7,5 hp****Projekt: Säkerhetsavstånd i bilköer**

When traveling at a constant speed along a straight road, how quickly can a car stop in an emergency? How might the minimum overall stopping distance differ between, say, having to stop for a child who run into the road when you are traveling at 50 km/h, and having to stop for a broken vehicle on a crowded high way when you are traveling at 90 km/h.

Apart from the speed of the car, how do factors such as the weight of the car, driver's reaction time, type and quality of brakes and tires, and weather conditions affect the minimum stopping distance?

By extracting the important features on which the stopping distance might depend, build a model so that you can predict stopping distances.