SJÄLVSTÄNDIGT ARBETE I MATEMATIK

Onsdagen den 20 juni kl. 10.00–11.00 presenterar Xiaoyan Zhang sitt arbete "Traffic Flow theory" (30 högskolepoäng, avancerad nivå).

Handledare: Sara Maad

Plats: Sal 21, hus 5, Kräftriket

Abstract: The purpose of this paper is to introduce how to model traffic problems by using applied mathematics, We are not interested in individual cars, instead, we study the continuously distributed quantity ρ, which is the linear density of traffic on the road, measured in cars per kilometer. By the law of conservation of cars, and using several different speed-concentration models, we obtain the traffic flow model in PDE form. We solve these PDEs by the method of characteristics and numerically. We also introduce how to use this model to predict the timing of traffic lights.
Alla intresserade är välkomna!