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Mikroelektronik, tillämpad fysik, mekanik, 7,5 hp 2007/08



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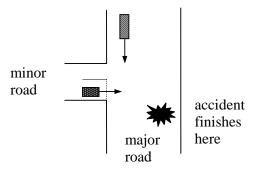
KTH Mekanik

Läsåret 07/08

SG1108 Tillämpad fysik, mekanik, 7,5 hp

Projekt: Bilkollision i vägkorsning

An accident between two vehicles occurs at a T-junction. How can the police determine whose fault it is?



The police measure the skid marks and their direction and obtain results such as are shown in the figure. Assume that the cars are locked together after the collision.

Will it be possible to judge whether the vehicle on the minor road was traveling at a reasonable speed?

The model above assumes that the vehicles collided at right angles and that they did not rebound. How will your analysis be modified in the case when the vehicles rebound producing two skid marks. Then also discuss how you would decide on a suitable value for the coefficient of restitution.