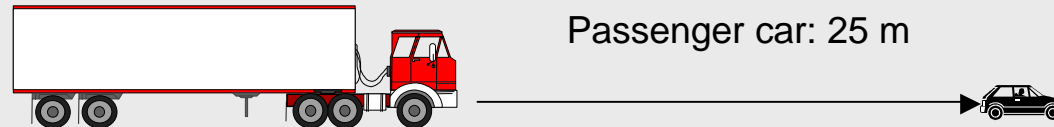


Influence of the
tire at the
stopping
distance

Stopping distance: comparison pc - truck

Speed 80 km/h

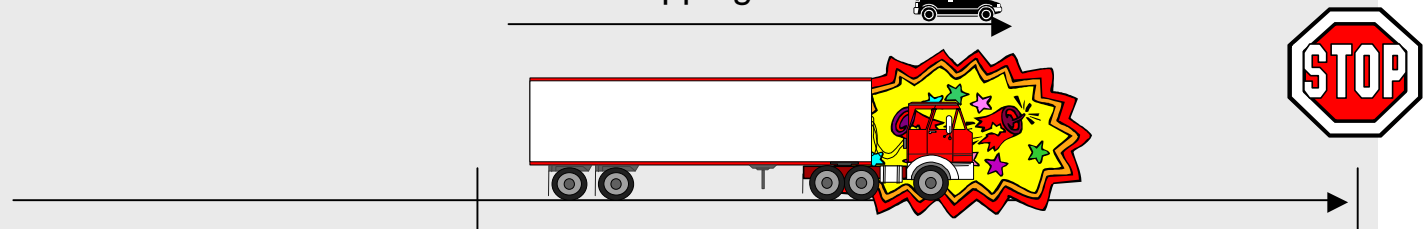


Emergency stop at 50 miles/h

25 m stopping distance

Crash-speed

48 km/h



1s reaction time, 22 m

Truck: 39 m stopping distance

Influence of the
tire at the
stopping
distance


ABS: a new task for tires



ABS, EBS, ESC
controls the tire!



the tire is responsible
for all forces on the road



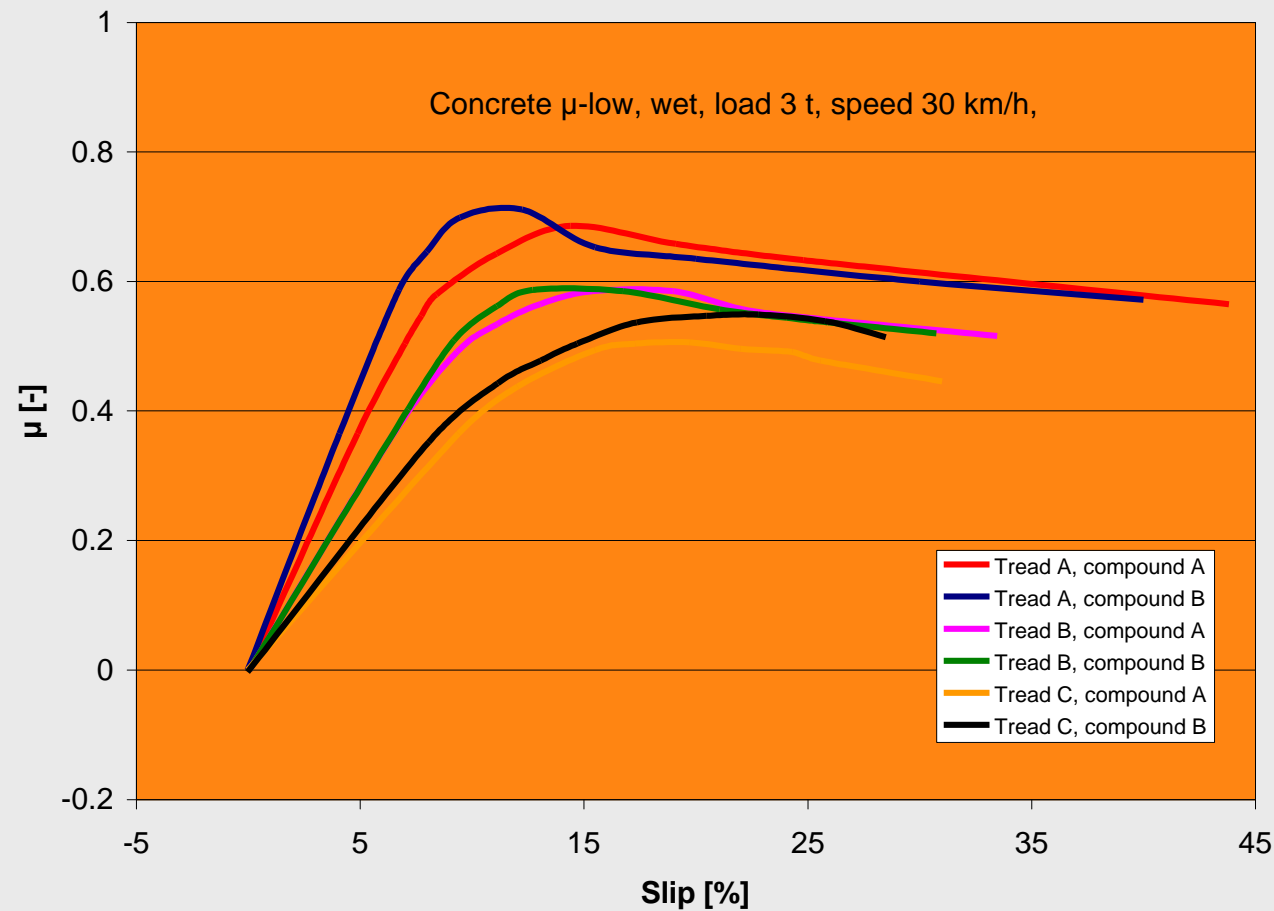
stopping distance, driving stability,
comfort, wear on brakes and tire

synergies have to be used!

Influence of the
tire at the
stopping
distance

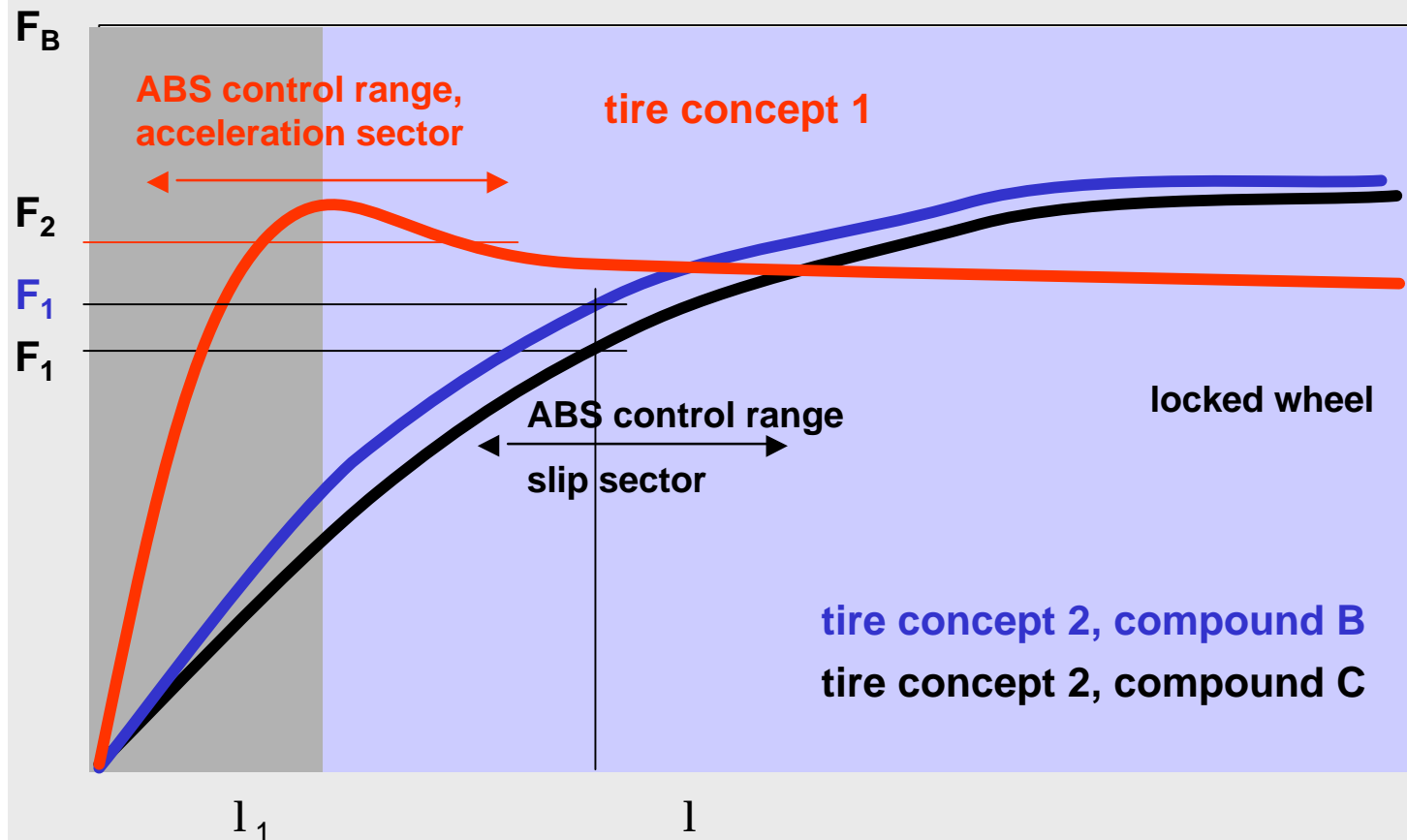
Core result:
30%
difference
between
normal
production
tires!

Tire characteristics



Influence of the
tire at the
stopping
distance

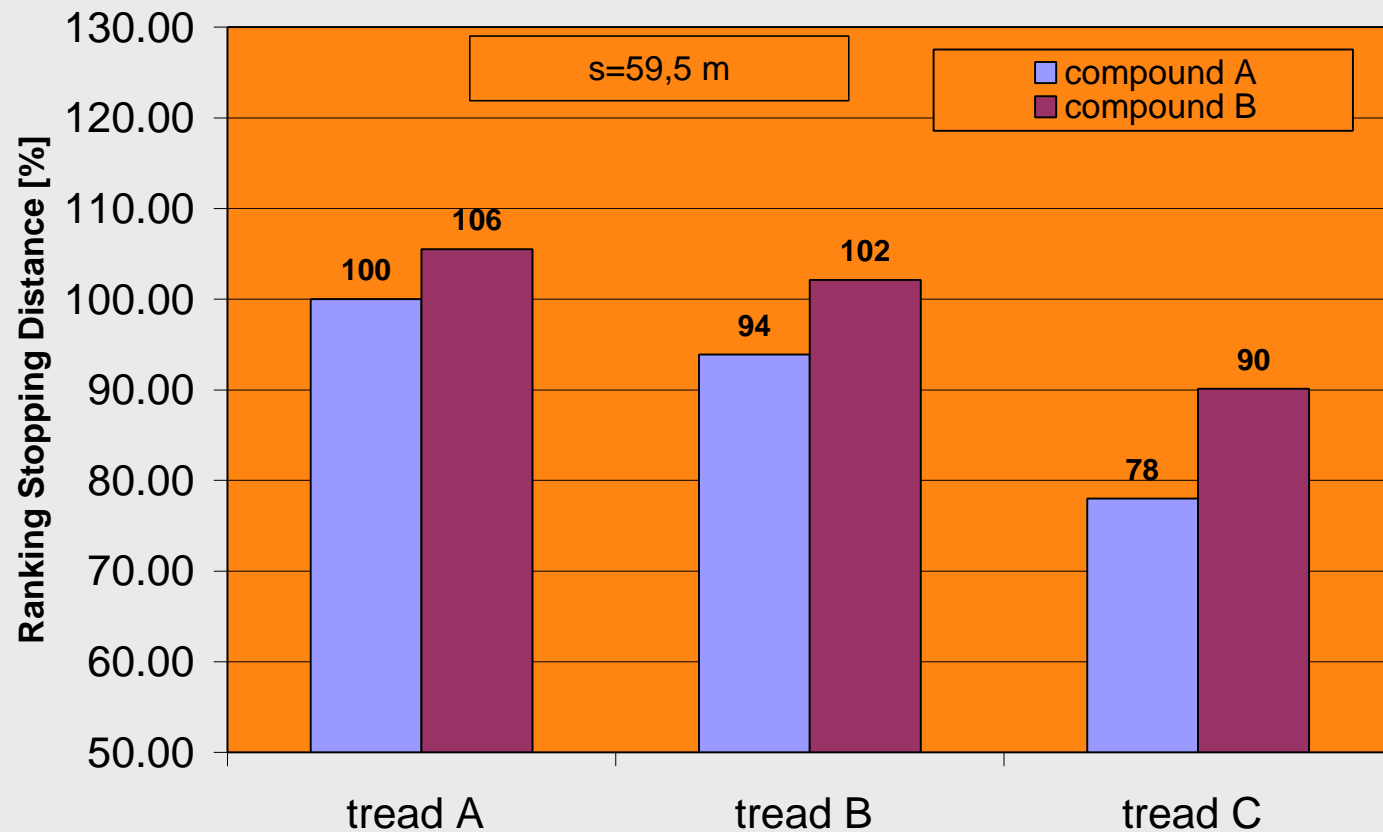
Influence tire characteristics to ABS control systems



Influence of the
tire at the
stopping
distance

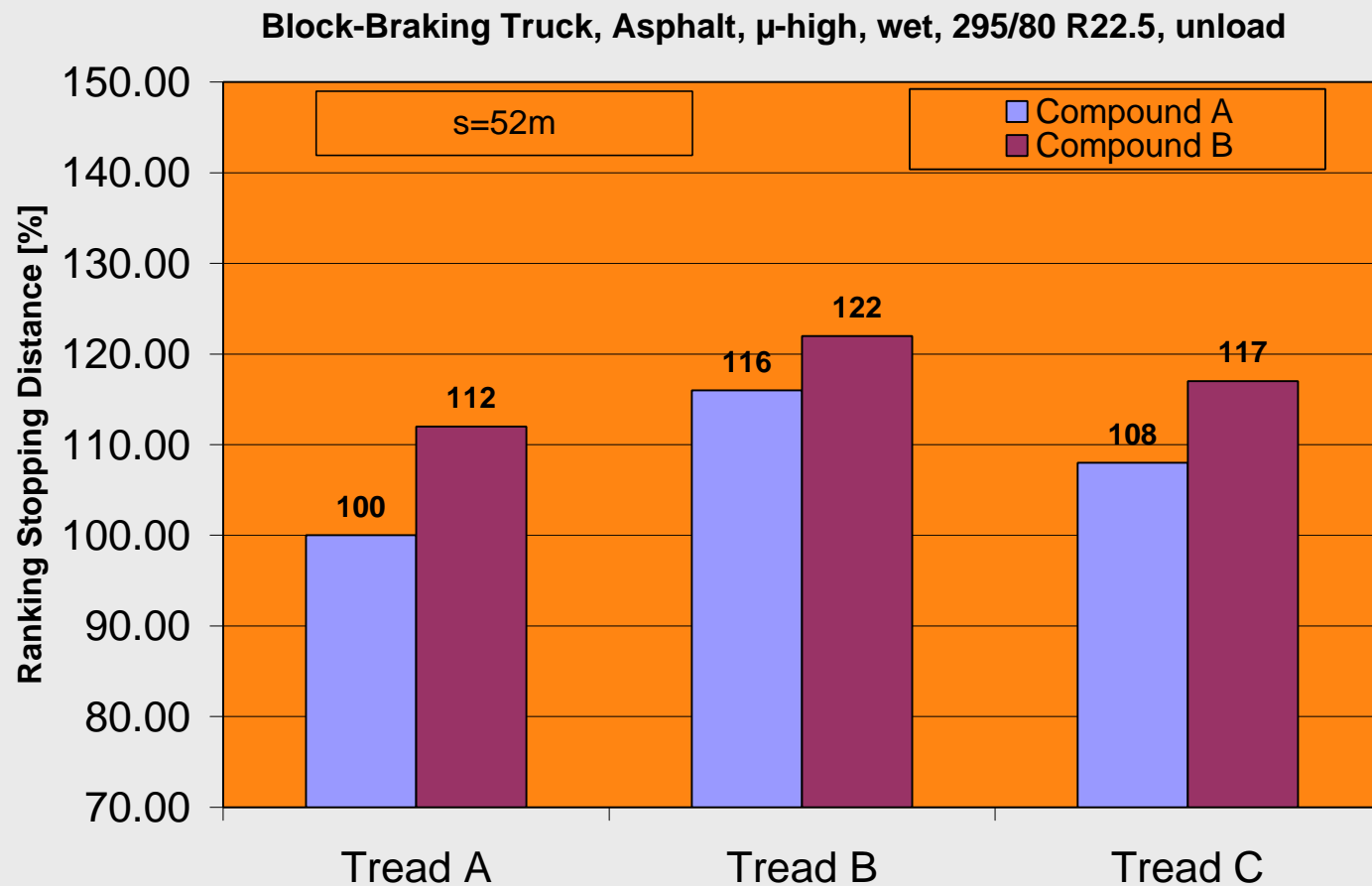
Influence of tread and compound

ABS-Braking Truck, Concrete, μ -low, wet, 295/80 R22.5, VA 6t, HA 8,7t



Influence of the
tire at the
stopping
distance

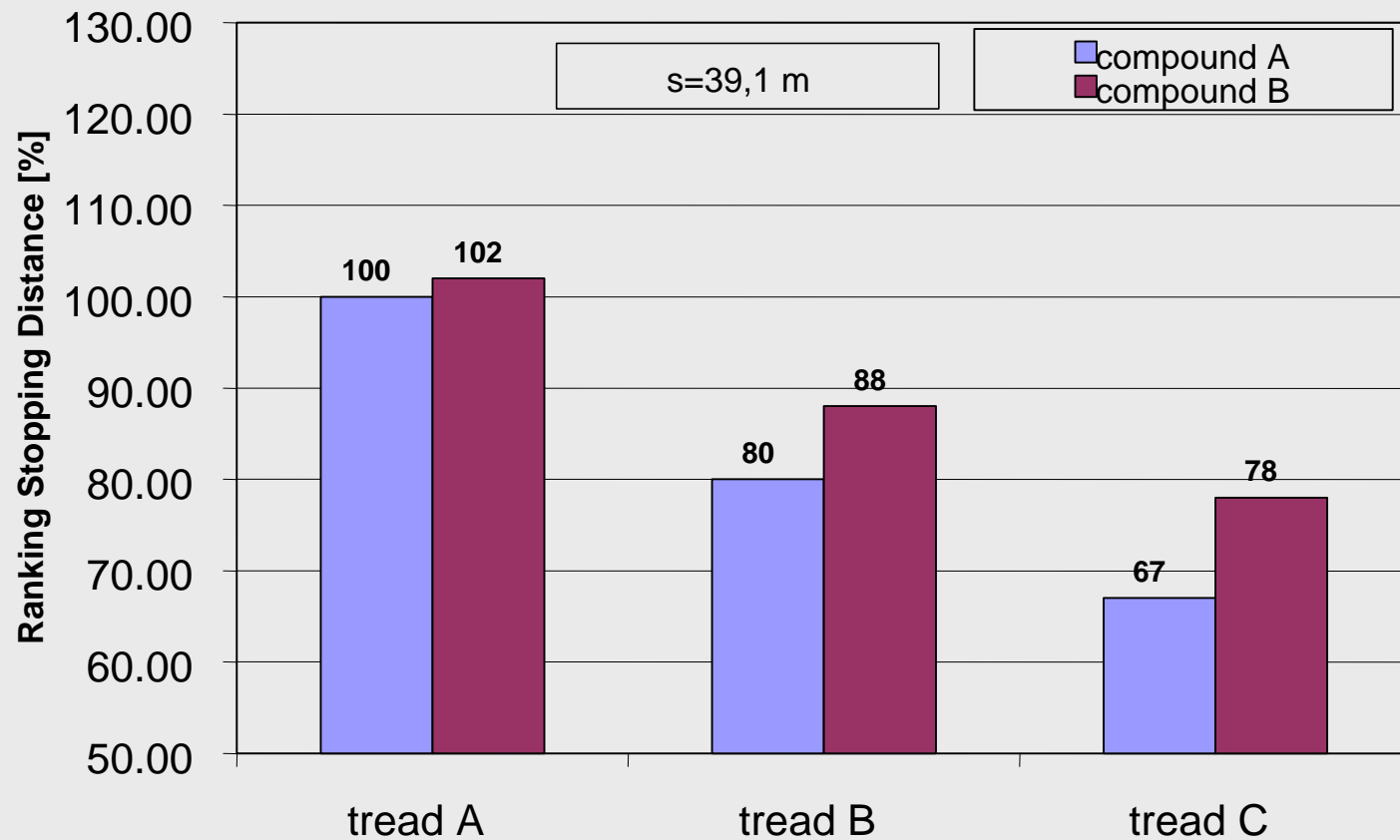
Influence of tread and compound



Influence of the
tire at the
stopping
distance

Influence of tread and compound

ABS-Braking Truck, Asphalt, dry, 295/80 R22.5, unload



Influence of the
tire at the
stopping
distance

Influence of the contact pressure

