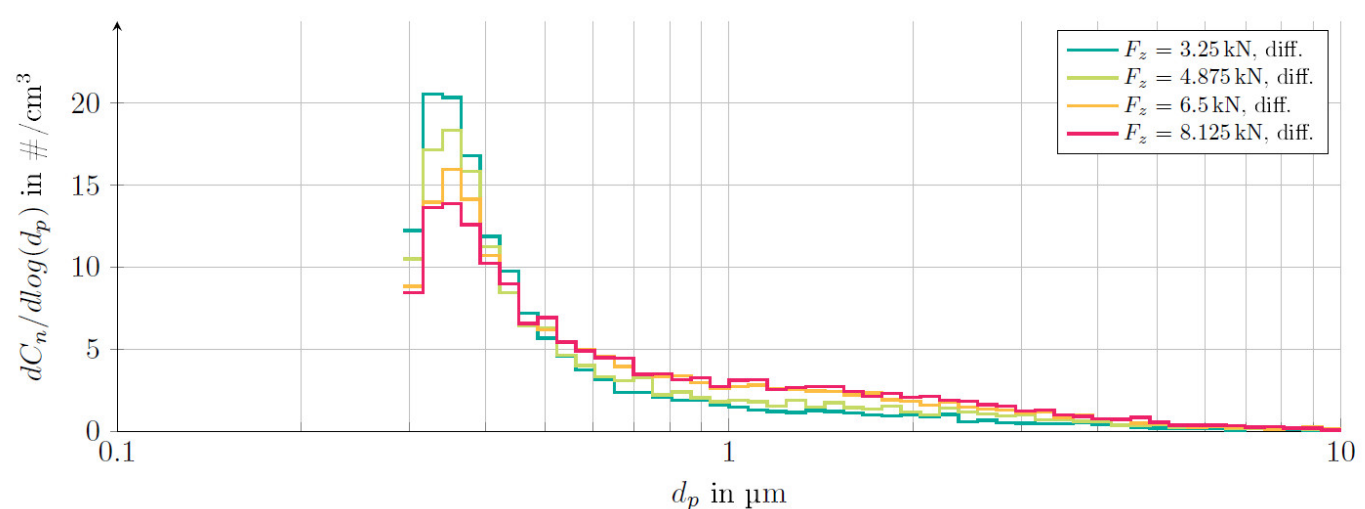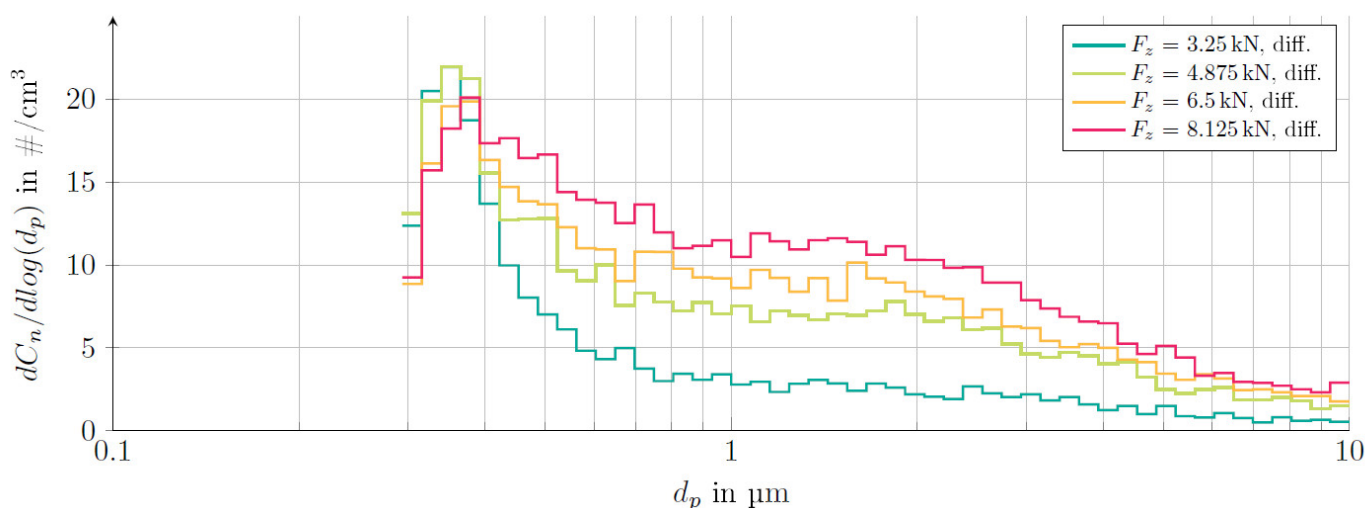# Influence of Vertical Load, Inflation Pressure, and Driving Speed on the Emission of Tire–Road Particulate Matter and its Size Distribution

Stefan Schläfle, Meng Zhang, Hans-Joachim Unrau and Frank Gauterin
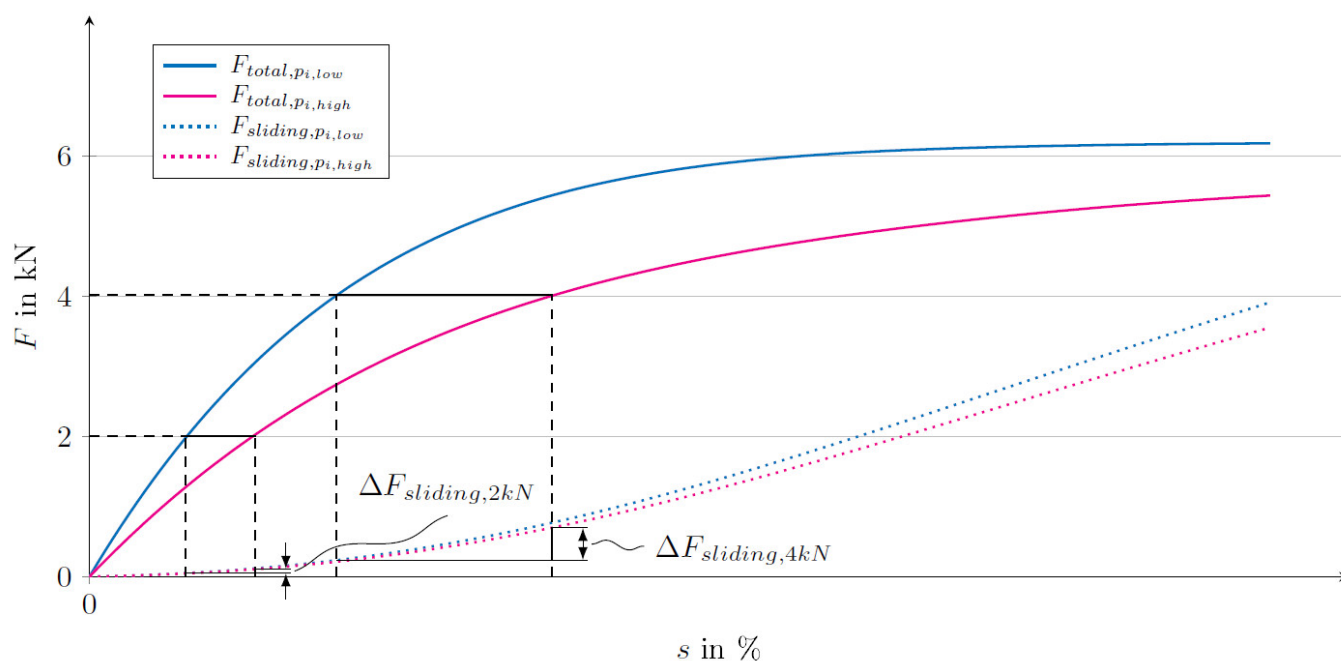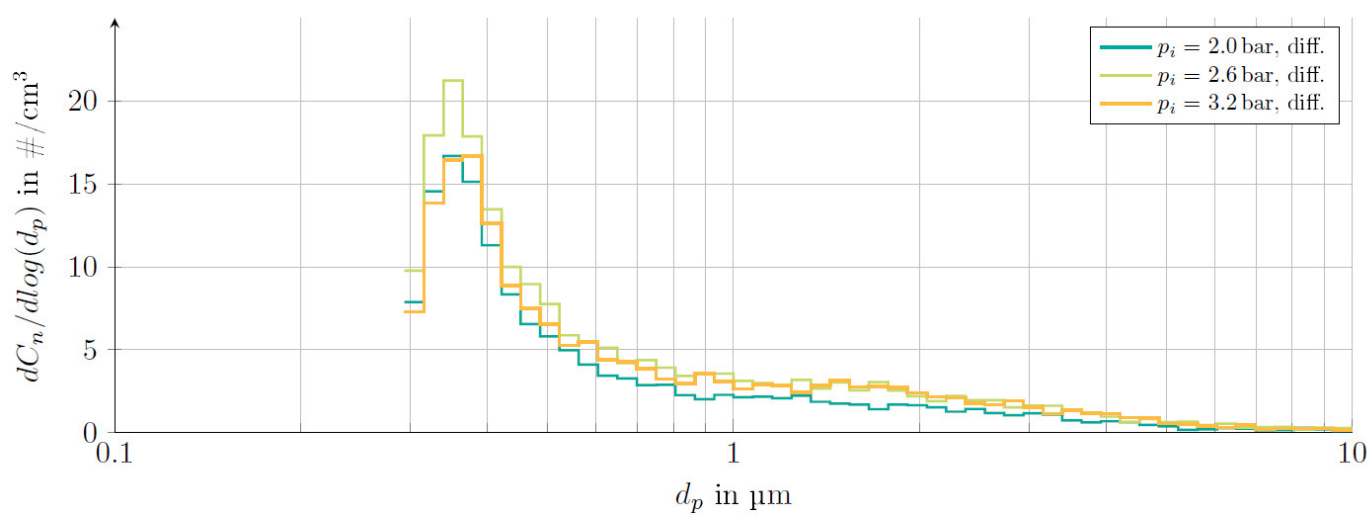

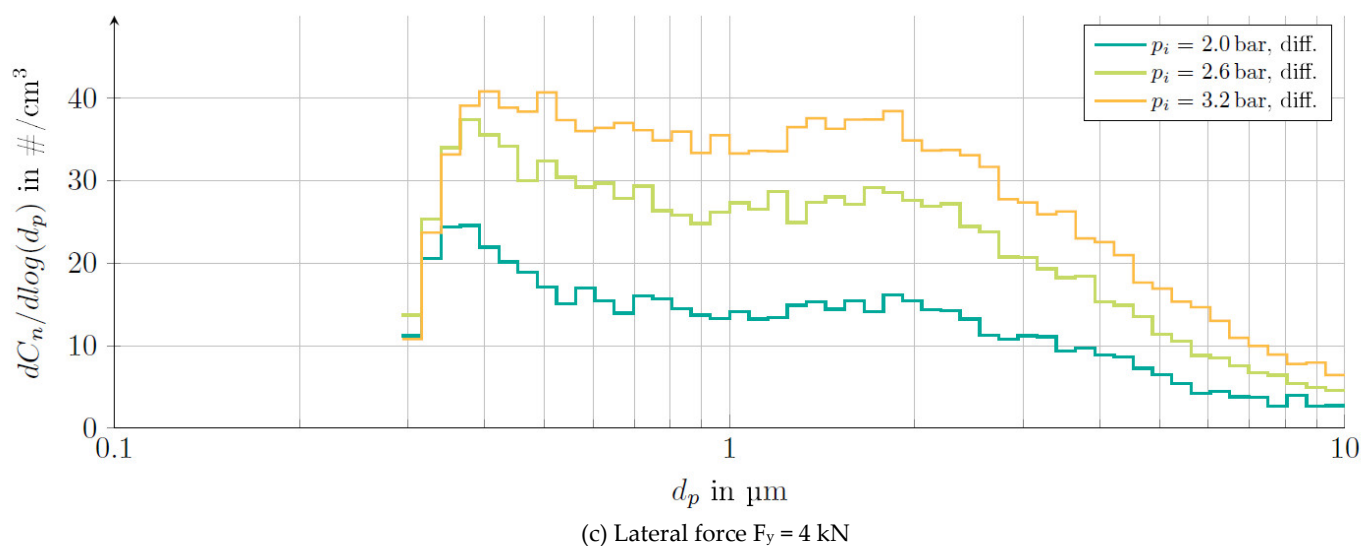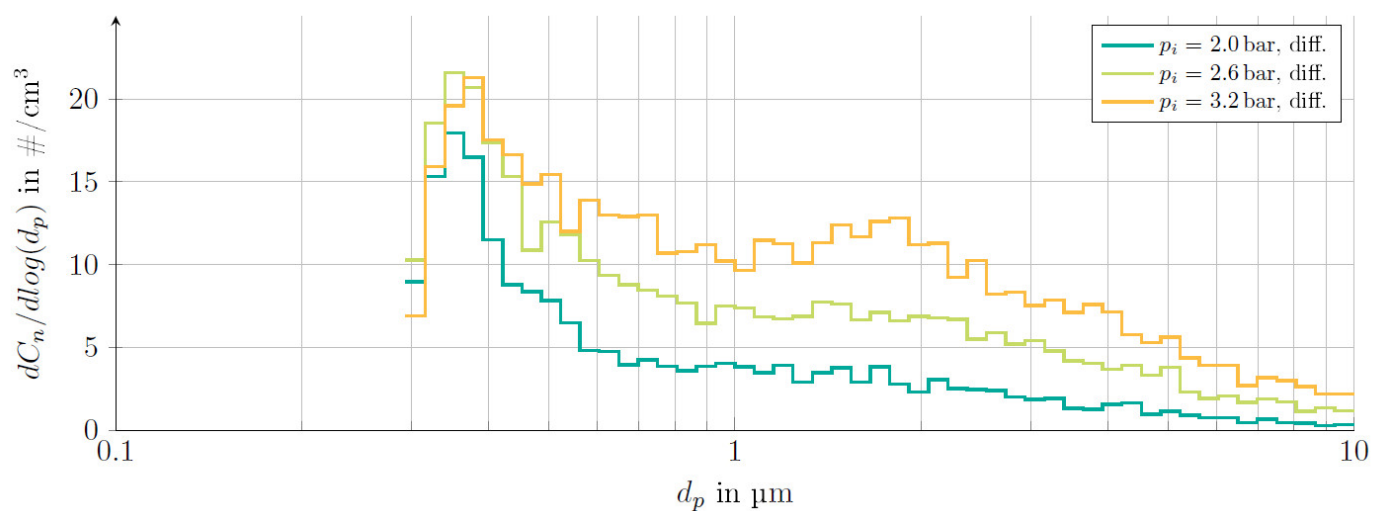(a) Free rolling

(b) Adhesion utilization $F_x/F_z = 0.62$

Figure S1. Influence of vertical load on the particle number distribution at different load conditions in non-normalized view.
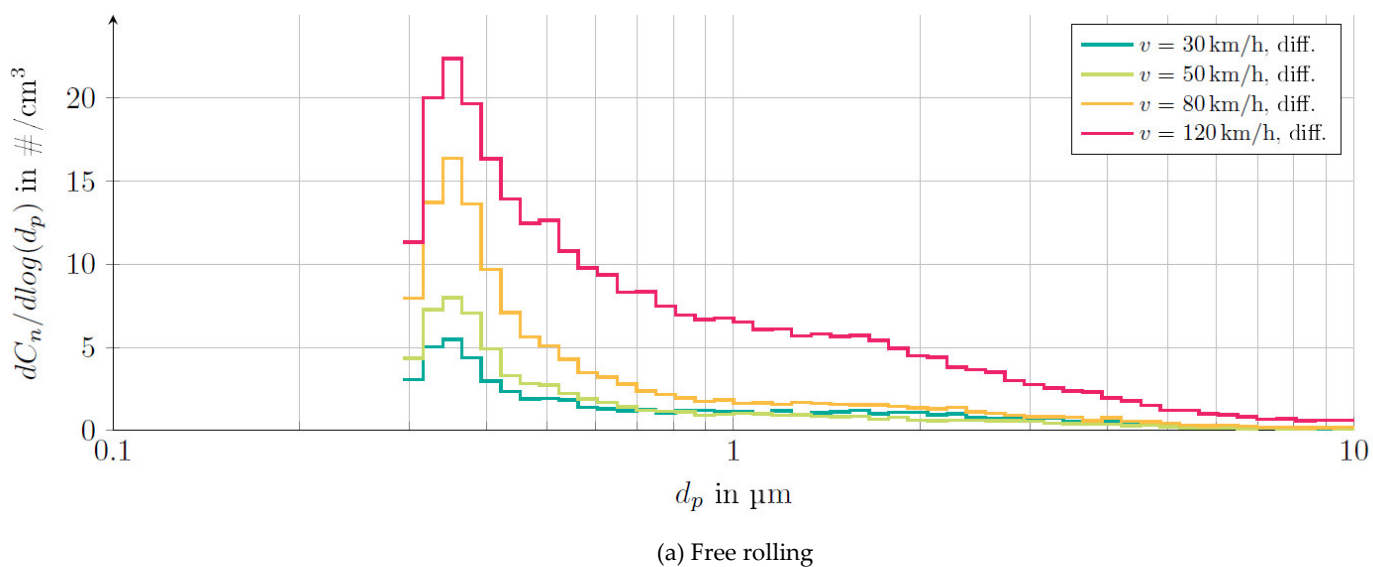
Figure S2. Total tire force and proportion of force due to gliding slip as a function of slip for two different tire inflation pressures.
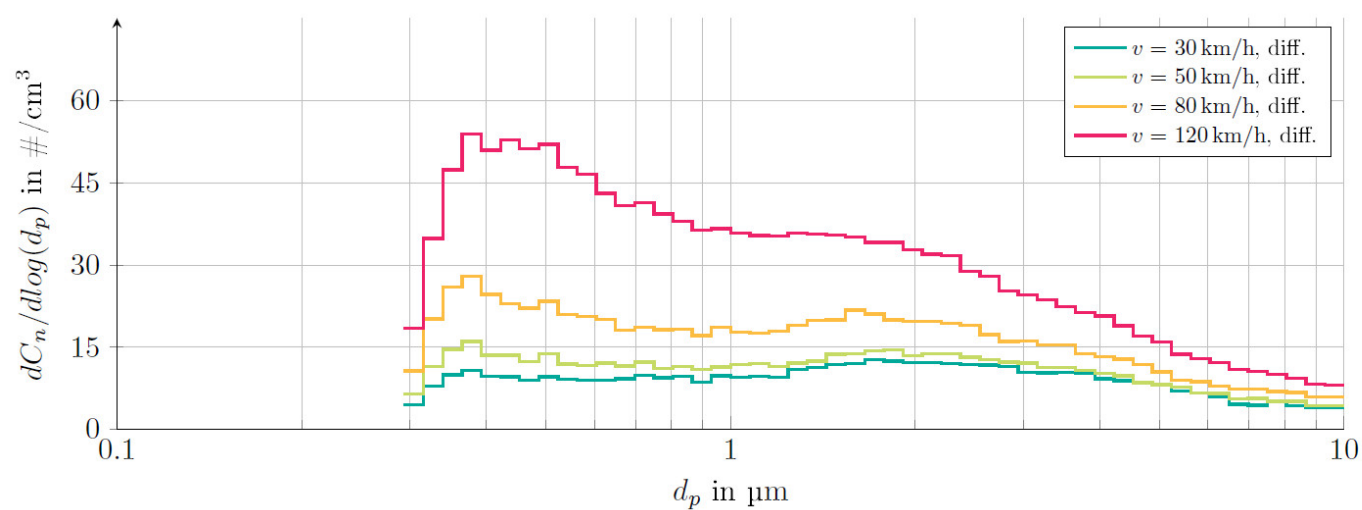

(a) Free rolling

(b) Longitudinal force F$_x$ = 4 kN

(c) Lateral force F$_y$ = 4 kN

Figure S3. Influence of tire inflation pressure on the particle number distribution at different load conditions in non-normalized view.

(a) Free rolling

(b) Lateral force F_y = 4 kN

Figure S4. Influence of driving speed on the particle number distribution at different load conditions in non-normalized view.