

Supplementary Information:
A Touch of Stribeck - Finger-Pad Friction in
Viscous Liquid Spreading

Maja Fehlbberg^{1,2}, Dominik Schmidt¹, Sairam Saikumar^{1,2},
Müge Cavdan³, Knut Drewing³, Roland Bennewitz^{1,2*}

¹*INM - Leibniz Institute for New Materials, Campus D2 2,
Saarbrücken, 66123, Germany.

²Saarland University, Department of Physics, Saarbrücken, 66123,
Germany.

³Experimental Psychology, Justus-Liebig Universität,
Otto-Behaghel-Str. 10F, Giessen, 35394, Germany.

*Corresponding author(s). E-mail(s): roland.bennewitz@leibniz-inm.de;

Contributing authors: maja.fehlbberg@leibniz-inm.de;
dominik.schmidt@leibniz-inm.de; sairam.saikumar@leibniz-inm.de;
muege.cavdan@psychol.uni-giessen.de;
knut.drewing@psychol.uni-giessen.de;

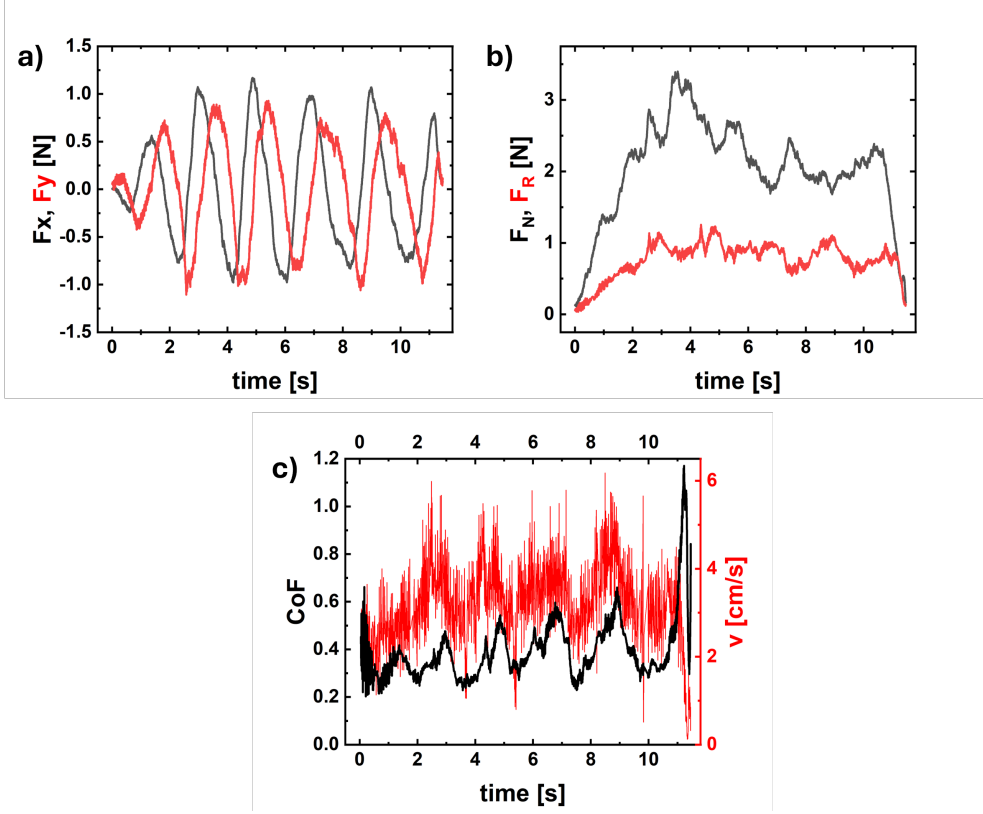
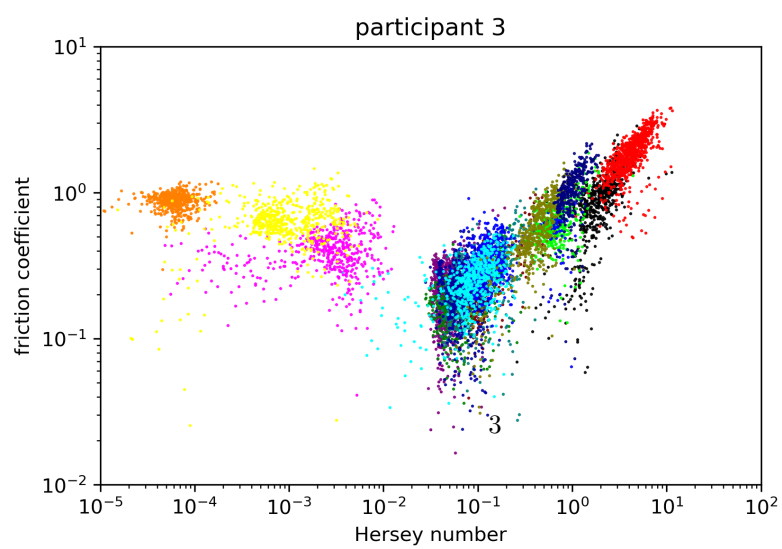
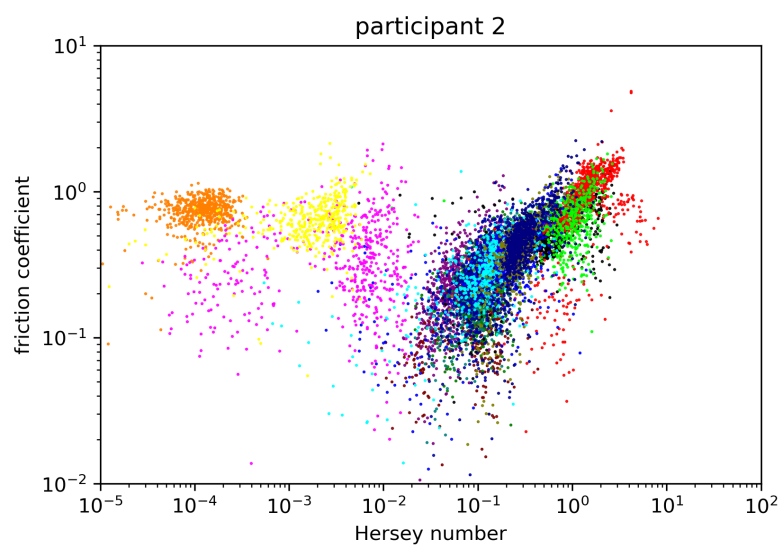
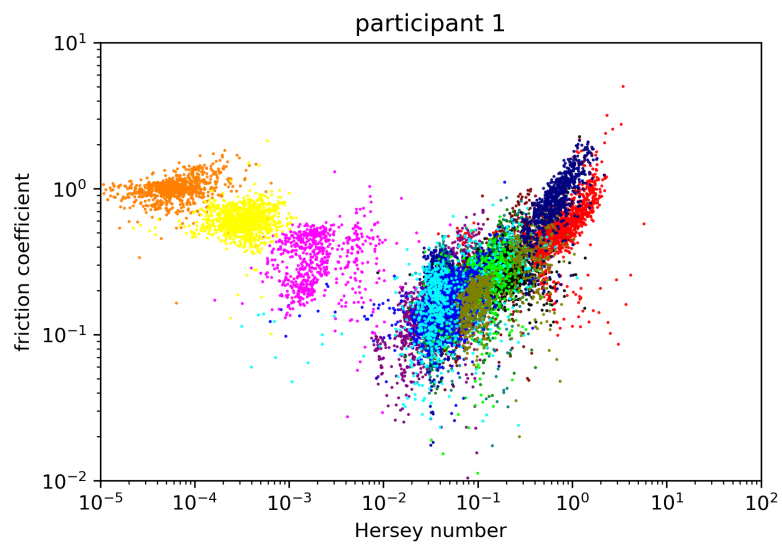
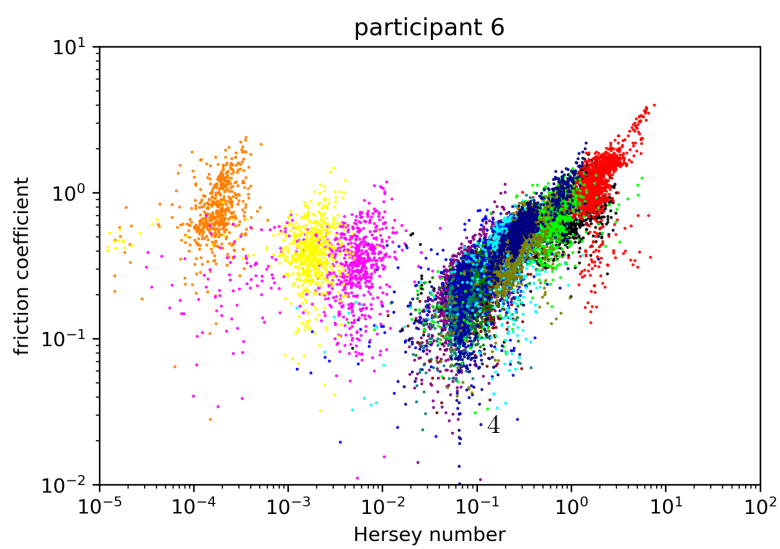
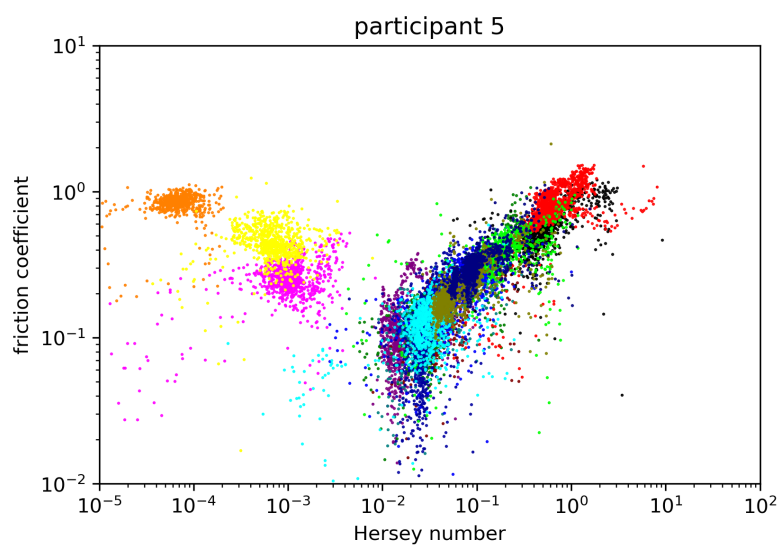
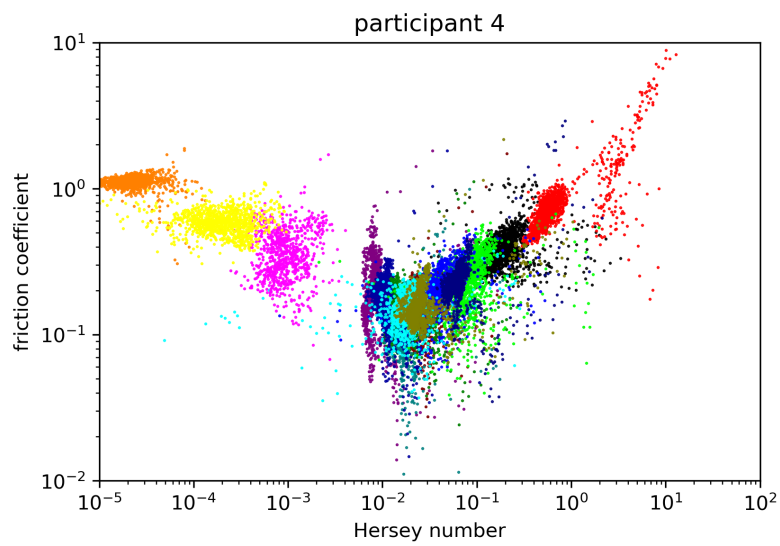
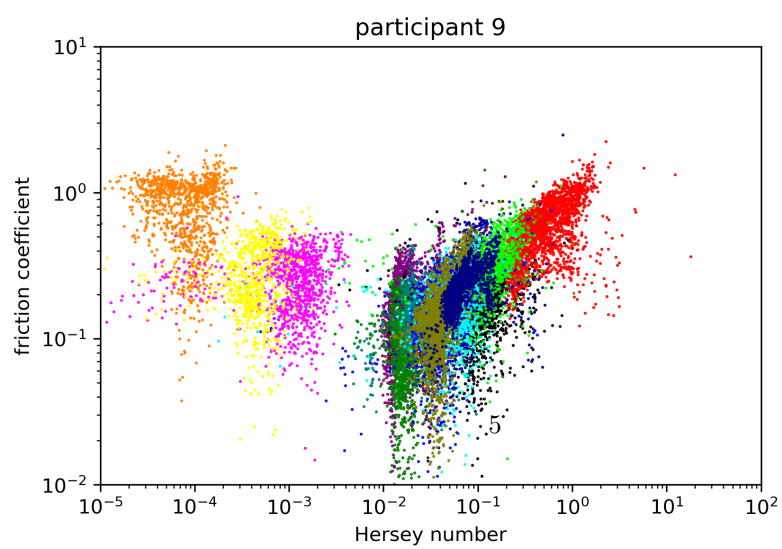
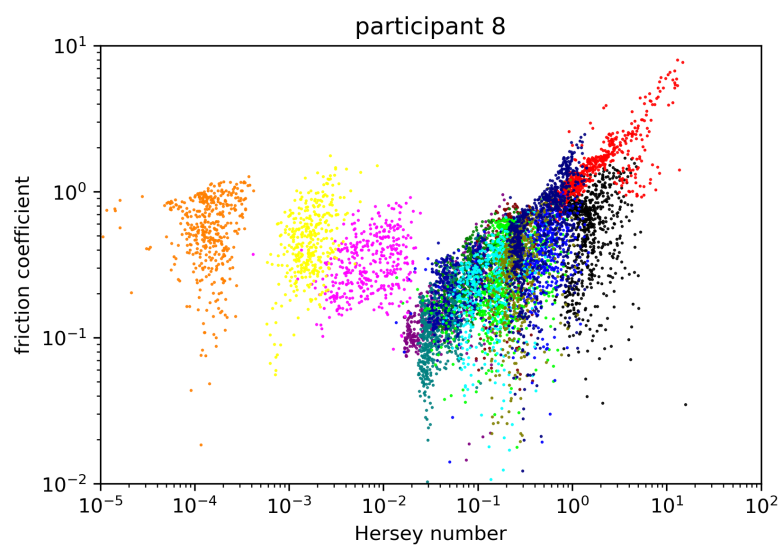
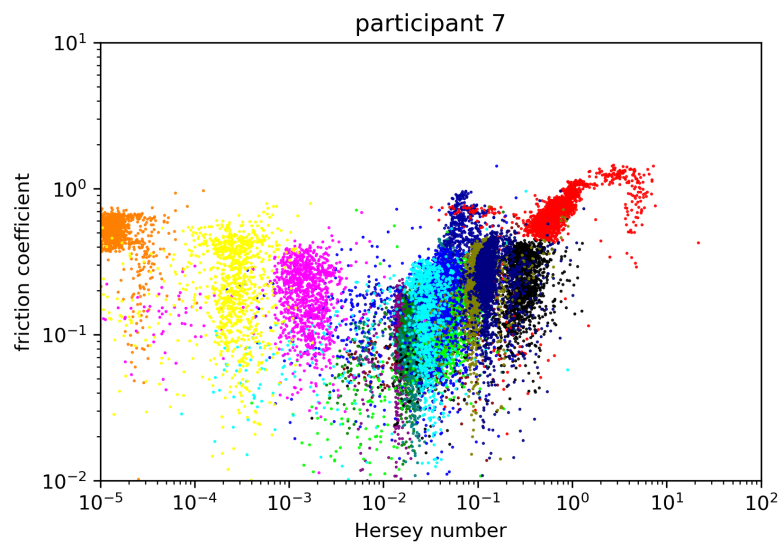


Fig. S1: Exemplary data set for the trial of participant 4 spreading the liquid sample 10 gr + 3 gr starch by circular motions of the finger pad. a) Lateral forces F_x and F_y reflect the circular motion of the finger pad. b) Normal force F_N and friction force $F_R = \sqrt{F_x^2 + F_y^2}$. c) Coefficient of friction (CoF) $\mu = F_R/F_N$ and speed v . This data set is also basis of Fig. 1b and Fig. 4b in the main publication.







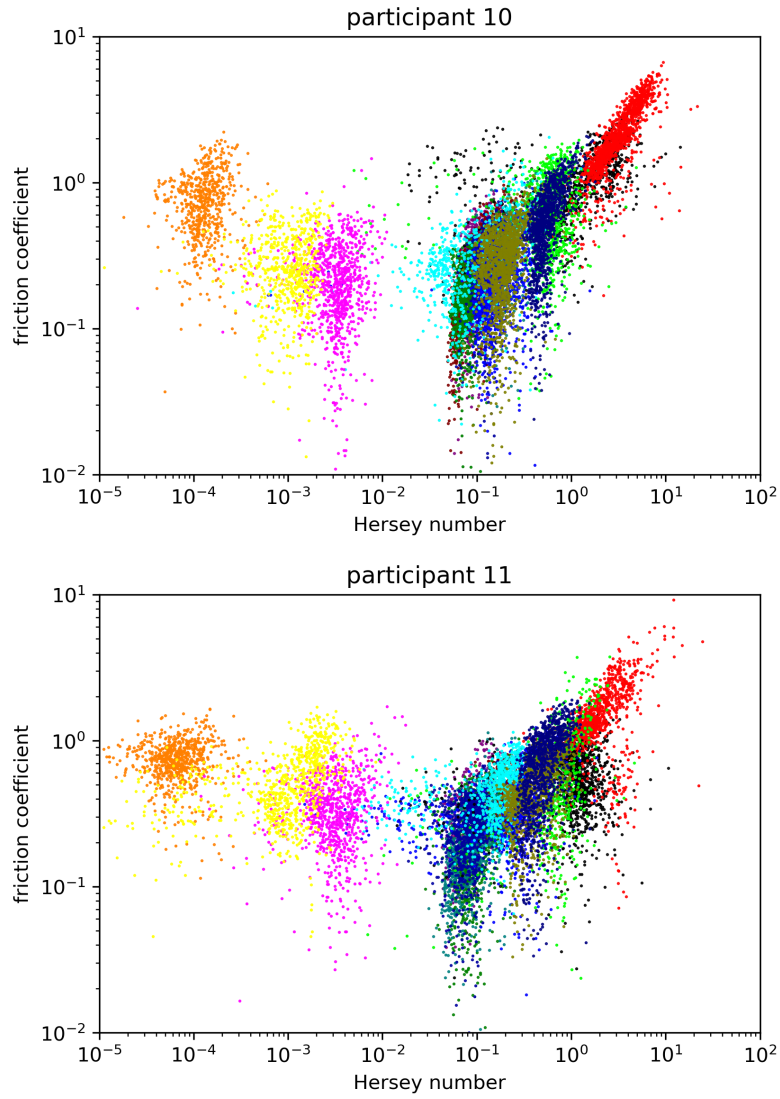


Fig. S2: Friction coefficients as a function of the Hershey number for all participants and all samples. All data points during each spreading trial are plotted. Color codes for samples are given in Fig. 2 of the main manuscript.