

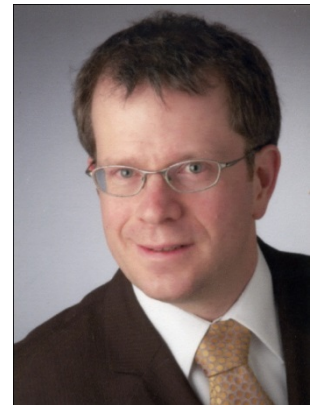


› Allgemeines Physikalisches Kolloquium

› Donnerstag, 08.12.2016 um 16 Uhr c.t.

Prof. Dr. Christian Wagner

Universität Saarbrücken



Clustering of red blood cells: A model system for soft deformable colloids

Cell migration and flow through the vascular network are determined by the physical properties of the blood cells. We perform in vitro, in vivo and numerical studies on the formation of highly ordered clusters of blood cells in capillaries under physiological flow conditions. Our results show that cluster formation is determined by the flow structure coupling, by hydrodynamic interactions between the cells and by an additional interaction mechanism that is induced by the plasma macromolecules, based on either a depletion or a bridging mechanism.

