In-Plane Dynamics of Membranes with Immobile Inclusions NAOMI OPPENHEIMER, HAIM DIAMANT, School of chemistry, Tel Aviv University — Cell membranes are anchored to the cytoskeleton via immobile inclusions. We investigate the effect of such anchors on the in-plane dynamics of a fluid membrane and mobile inclusions embedded in it. The immobile particles lead to a decreased diffusion coefficient of mobile ones and suppress the correlated diffusion of particle pairs. Due to the long-range, quasi-two-dimensional nature of membrane flows, these effects become significant at a low area fraction (below one percent) of immobile inclusions.

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