





Figure Captions for Supplementary Information:

Fig. 1: Calculated interaction potentials, $V(r)$, in units of $k_B T$, for three different values of the screening length, κ^{-1} , assuming that the surface charge remains constant. The top curve shows the experimental data and the fit to the theory. The lower curves are calculated using the same parameters for the colloidal particles (surface charge density and wetted area), but with the screening length decreased by a factor of 2 (middle) and 10 (lower). The attractive secondary minimum becomes less than $k_B T$ in depth as κ^{-1} decreases by only a factor of about 3, demonstrating the extreme sensitivity on salt concentration, if the surface charge is constant.

Fig. 2: Microscope image of a water drop containing 5 mM NaCl partially covered by colloidal particles. At this coverage, there is no ordering of the particles, confirming the absence of an attractive interaction between them. The repulsive interaction is also reduced, so the particles are more susceptible to aggregation due to van der Waals attraction, as reflected by the larger number of dimers visible in the picture. Ordering does occur at higher surface coverage (not shown), caused exclusively by the effects of confinement and interparticle repulsion.