On the relationship between Exclusion Zones and Coherence Domains in water Vladimir Voeikov, Moscow State University Emilio Del Giudice, Retired Physicist, Milano

Any real water contains interfacial and bulk water Biological interfacial water does not mix with bulk water Jerald H. Pollack: Thick layers of organized water form near hydrophilic surfaces Crevices are filled with liquid crystal Crystalline water is gel like Exclusion zone water/interfacial water/aqueous adjacent to hydrophilic surface EZ water is physically different from bulk water Higher viscosity Lower structural temperature Lower self diffusion coefficient Optical Absorption at lambda = 270 nm, fluoresence It is dynamically organized, liquid crystalline, quasi-polymeric

EZ water may be charged negative or positive, the same as the surface it adheres to. Normally in electrostatics, likes repel and opposites attract In EZ water, likes repel, but since they are fixed, they vibrate There collective vibration COULD become coherent due to principle of minimum energy

Preparata-Del Giudice water model is based on quantum field theory According to QFT, all particles and their associated fields vibrate.

"when water vapor condenses into water, water molecules vibrate in phase due to minimum energy considerations"

This statement loses me. It doesn't make any sense, and seems to apply to condensed water vapor, not EZ water.

It goes on to talk about quasi-free electron and proton vortices which can collect and convert external energy.

EMFs produced by the negatively charged surface may resonate with the oscillations of the small isolated CDs, which are attracted to the negatively charged surface due to "resonance attraction".

It is claimed this resonant attraction was observed in the monitoring of erythrocyte sedimentation in whole blood. Actual images of this process are shown.

http://www.waterjournal.org/uploads/vol5/supplement/Voeikov%20and%20DelGiudice.pdf