The icosa tetrahedral tessellation (ITT) of H^3 has a vertex figure rhombicosidodecahedron (RID). Surprisingly, this corresponds to the third shell of the icosahedral supercluster (ISC) for water near freezing point and also metal glasses. The challenge is to understand how the complement of the vertex figure of ITT, which should be outside it, can correspond to the first and second shell of the ISC which are below the third shell.

The obvious guess is that the ITT realized at the field body of the ISC is related by inversion to ISC. M^8-H duality, as the TGD counterpart of the momentum position duality, involves inversion in $M^4 \subset M^8$, having interpretation as momentum space, mapping it to $M^4 \times CP_2$. Is $M^8 - H$ duality involved?

This question led to surprising developments suggesting deep connections between fundamental physics ($M^8 - H$ duality and the notions of gravitational and electric Planck constant as implications of number theoretic vision), physics of water (hydrogen bonded water clusters), consciousness theory (field body as controller of biological body forming sensory representations of biological body), biology (ITT view of the genetic code) and cosmology (generalization of Hubble's law to all scales).