Voids in the ground state are negative Mass/Energy/Pressue.

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Hi Peter_Bjørn_Perlsø,

If the cosmos was homogenous water, then that's the ground state.
the bubbles would be voids in the ground state,
i.e. negative Mass/Energy/Pressure (by conversions such as e = m * c^2);
so, according to General_Relativity, they'd repel.
The net energy of the cosmos is negative, by the way.
Specifically... given that the first law of thermodynamics posits that
the mass−energy of a closed system is constant.
And the second law asserts that that mass−energy spontaneously dissipates...
The cosmos is a closed system who's net energy
(including Dark_Energy/Negative_Pressure/Negative_Energy) is constant;
and its entropy always goes up because its temperature always goes down.

Even more specifically (if you have the Time/Energy/Patience)...

The speed of light in an _Ideal_ vacuum is a constant
(and therefore independent of the speed of the source)
for the same reason the speed of sound in a certain atmosphere is constant.
But:

1. A vacuum has no wind.
2. Only photons can travel that fast.
3. Nothing (no information) can travel faster.

Nothing can travel faster than a photon because
it'd take infinite acceleration (and thus infinite directed energy)
to accelerate something with a non−zero rest mass.
Further, the energy need to accelerate it would incinerate it.
True singularities can't exist for a similar reason;
they couldn't possibly emit infinite energy at their event horizons.
True vacuums also can't exist for a similar reason;
it'd take infinite directed energy to create a perfect vacuum.
The gravitational field of Space/Time/Objects is determined by
density and pressure.
A virtual singularity, such as the one at the start of the Big Bang
(before our now−visible universe was Planck density)
or at the center of a virtual black hole has these properties:

* the SI second (i.e. X oscillations of SI's cesium maser)
takes an eternity (by earth's standards),
so no time passes (an obvious absurdity).

* the SI meter is infinitely wide (by earth's standards),
so no volume exists (an obvious absurdity).

* the SI kilogram is infinitely weak (by earth's standards) because
the radiation pressure (which could define it) is infinitely dissipated;
so infinite Mass_Energy exists (an obvious absurdity).

Cosmically, the geometry of spacetime (4D) is ever−flat (euclidian)
with no center of gravity; but, just as you can define the SI kilogram
using X oscillations of a maser,
(or atom laser, by conversion from its pressure, given a steady intensity),
pressure is a 5th _Spatial_ dimension, demarcatable (by conversions)
in SI meters, SI seconds, pascals, Kelvin, and/or entropy.
The units of entropy are Joules per Kelvin, but only the Kelvin changes;
so the entropy goes up as the temperature of the universe drops.
Think of entropy as a measure of how dissipated (i.e. consumed) something is.
(The sixth spatial dimension is probably Coulombs, i.e. Free_Energy)

Zooming out, a photon observed today from the birth of the CMB
underwent X oscillations... which, by conversions
(c * t, Pressure_Cosmos = − (.74 / .26) * Density_Matter * c^2),
represents a length, a duration, and
a pressure field (i.e. a mass, by conversion):

Pressure_Time_Space: Five _Spatial_ dimensions.

Zooming in, the SI meter, second and kilogram
can each be defined as oscillation counts.
Sans zooming, my directional (WiFi) antenna (for example)
has an infinite number of orientations at any given X, Y, Z, T;
so, there's no limit to the number of unique films (i.e. time slices)
that can be recorded at a given X,Y,Z.
Each orientation is a point in a pseudo−random pressure field.
Like a dice toss is known to be pseudorandom (i.e. causal),
time is psuedo−directional (i.e. spatial)
because all randomness is pseudorandom.

Spacetime in our observable universe has always accrued exponentially.
It accrued faster when the universe was denser;
so I suspect dark energy is a property of mass−energy;
i.e. it's just spontaneous dissipation... entropy.
If it weren't so, then tons of dark energy is being spontaneously created
in violation of the first law of thermodynamics... a big no−no in my book.
(I posit that gravity is merely left−overs from the ever−denser past)
Thus black holes might be full of Negative/Dark_Energy;
i.e. a time−dilated White_Hole with

great Coherence/Free_Energy/NegEntropy/Life/Relativistic_Mass.

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