

A Q(uantum)M(echanical) theory of everything can be given with the following facts/rules:

1. Experimentally all descriptions of physics must be relativistic:

S(pecial)R(elativistic) \rightarrow G(eneral)R(elativistic) \rightarrow C(omprehensive)A(ction)P(inciple) \Rightarrow
 \Rightarrow All so-called elementary particles must be described as extended particles in the 2D-plane orthogonal to the observed direction of motion (worldline).

2. The 2D-extendedness of all elementary particles is described by two consecutive first order time derivatives. This can only be solved mathematically with two B(oundary)C(onditions). Both BC can be solved either as open BC or as closed BC. Open BC allow interactions in all 3D-spacelike directions. As a direct result such particles interact with the spin2 gravitational field, i.e. must have masses > 0 ! Such particles also allow more so-called particle families, i.e. they describe the well-known fermions with half-integer spins. All extended bosons must be solved with closed BC, so only interact in the direction of motion (worldline). As a direct result only bosons have the possibility to be massless. The fact that the solution of the 2D-extendedness is open or closed explains the statistical behavior of fermions and bosons in interactions completely.

3. Knots are only possible in 3D-space, i.e. 4D-spacetime. Extended fermions must be solved mathematically with open B(oundary)C(onditions). This mathematical characteristic allows interaction of fermions in all directions. As a result they must have mass (allow interaction with the spin 2 gravitational field in all directions). As a result of this fact fermions are only possible in 4D-spacetime and allow more families, with only different masses.

4. All elementary particles with all their characteristics follow completely from a full symmetry analysis (Poincaré symmetry group extended to comply to the symmetrical* CAP combined with a complete anti-symmetrical* $U(1) \times SU(2) \times SU(3)$ gauge-symmetry).

5. All Feynman rules of all Q(uantum)F(ield)T(theories) must be rewritten with extended harmonic oscillating points in the 2D-plane orthogonal to the observed direction of motion. The spacelike constant vector explains the spin(helicity) and the timelike constant explains why the energy of any particle always is proportional with a detected frequency. All elementary fermions aren't able to reach one another at zero-distance, but the closest distance in any calculation will be equal to the average extendedness of the harmonic oscillating particle, i.e. of the order of the Planck length. This removes all divergences of all QFT without the need of a Higgs-mechanism, but instead the extended spin2 graviton must be included to explain mass correctly. The standard Higgs mechanism is based on an elementary spinless boson (with a very high mass $> 170 \text{ GeV}/c^2$), but this mechanism does not comply to Einstein's CAP. The many extended particles perturbation QFT with included graviton will always be the most exact description of our universe, even though it's a perturbation theory.

Any description with interactions between fundamental elementary particles, derived from points 1 up to 4, is the most exact description of our uncountable many particles reality.

The statistical characteristics of the, gravitational field including, extended QFT are a consequence of the fact that all elementary particles oscillate, i.e. aren't point-particles, and the fact that the amount of interacting particles will never be countable, i.e. is an unknown variable in any experiment.

* The gravitational action follows from the symmetrical transformation tensor and the CAP implies any physical model should always include this action. This is why I call the CAP a symmetrical effect. The source of the gravitational field is mass, so all mass effects are related to the symmetrical transformations. Likewise, all charge related actions follow from the anti-symmetrical symmetry tensor and this symmetry is the only symmetry that allows so-called gauge-symmetry. In our 4D-reality, the maximum allowed gauge symmetry is the $U(1) \times SU(2) \times SU(3)$ gauge symmetry. Any extension of the dimensionality of this symmetry yields a reducible theory, which does NOT describe any possible characteristics of our 4D-universe.