

Abstract Submitted  
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**Mass as the Statistical Origin of Geometry and Dynamics** GE-  
OFFREY HOLSTROM — Mass has a performance in a geometry, but it starts  
without one. It comes from a space of formation intervals. A probability distri-  
bution exists, with mass as the intensive parameter. There is no geometry. Two  
formation interval spaces are taken. Bridge connections relate them. At a deter-  
mined union, one forms a neutrino, the other a massive particle. There are four  
connection operators, three anti-symmetric, one symmetric. Particles come from  
these four. The anti-symmetric ones are separate, in analogy to color. Symmetric  
ones exist together. Three neutrinos and six quarks are possible. Mass operators  
are in formation interval space, along with those for Maxwell fields. Once a mass  
exists, a geometry is possible. Units of mass are one over length. The coordinate is  
time. At undetermined unions, no mass is made. There is no time. Using the full  
Riemann and conformal tensors, a source from the anti-symmetric connections can  
be used. A spherical collection acts like gravity. One, on a scale of fm, is strong  
and might bind particles. Mass also allows time as the extensive variable, modifying  
large scale gravity.

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