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An Origin for Gravity and Electromagnetism when Mass and Specific Density are Statistical Intensive Parameters GEOFFREY HOLSTROM, Victor Valley College, SBVC, CHC, San Bernardino Co., CA — Mass and specific density can be understood as intensive parameters on the distributions of formation intervals, X and V , for a particle. (ijmpa v20 #15 6/20/05 p3317) Once properties form, space and time make sense for the particle. (Every X must have the same mass.) Mass can then be located by the average $\langle x \rangle$, with time as a parameter: the Dirac equation. Mass has a fluctuation, essential for its generation. Quantum mechanics does not see this as it deals only with the average of the mass operator. Maxwell's equations occur as properties do form. Geometry again appears. The created particle properties can be located by using the Dirac equation. The curvature operator is averaged, and the coordinates are $\langle x \rangle$ and t . A source is the intensive property of specific density. Averages are in flat as properties form in flat. Gravity occurs when properties do not form. Average of the curvature then gives an equation for the divergence of the full Riemann curvature plus the average of a three-index operator (A) . Coordinates are again $\langle x \rangle$ and t . It is an identical zero unless the space of the averages is curved. The Einstein equation can be generated from it, with T , if needed, put in by hand. Using the Weyl tensor, the Ricci and (A) tensors can be related. In empty space, (A) is zero, and the Ricci tensor is zero, as with Einstein. In non-empty space, components that are unable to form properties, are used to create (A) . The equation for the derivatives of the Ricci tensor must match to it. There is no property serving as a source.

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