

Abstract Submitted  
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**Potentials derived from  $SU(N)$  representations of interacting centers** JOHN JOHNSON<sup>1</sup>, Retired — The reducible decomposition of  $SU(N)$  into  $SU(2)$  basis groups can be interpreted as  $(1/2) N(N-1)$  spacetime bases. Each such basis can support single-point physical models including classical electrodynamics, quantum mechanics and general relativity. Constraints on the differential coordinates link the multiple bases. For  $N=3$ , these lead to interaction potentials among the several spacetime centers.  $SU(3)$  is used as an example to show how exchange currents, electrical charge with spin and a scalar  $1/r$  can arise. The progress to date is presented.

<sup>1</sup>Formally with AMRDEC, Redstone Arsenal AL

John Johnson  
Retired

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