1003-03-1658　　　**C M Patton*** (`charles.patton@sri,com`), 1120 Fir Acres Dr, Eugene, OR 97401. *Spatial Origin of Mathematical Metaphors.* Preliminary report.

Inspired (and irritated) by "Where mathematics comes from" (George Lakoff & Rafael Nuez; New York: Basic Books 2000), the presenter will attempt to convince the audience of three things: 1. That the human sense of space is sufficiently rich to support foundational mathematical metaphors separate and distinct from the counting-aggregate-set metaphors ascribed therein. 2. That, following Chou ("Mechanical geometry theorem proving" Kluwer Academic Publishers 1987) and Varadarajan ("Geometry of quantum theory" Van Nostrand 1968), this sense can be faithfully elaborated to closed algebraic fields and beyond. 3. That this approach, while formally equivalent to the standard framework, requires an infinitary process to establish this equivalence. In conclusion, it is suggested that there must be a corresponding brain-function diffence resident in the human population, one which could, perhaps be employed to insure that no child is left behind. (Received October 06, 2004)