

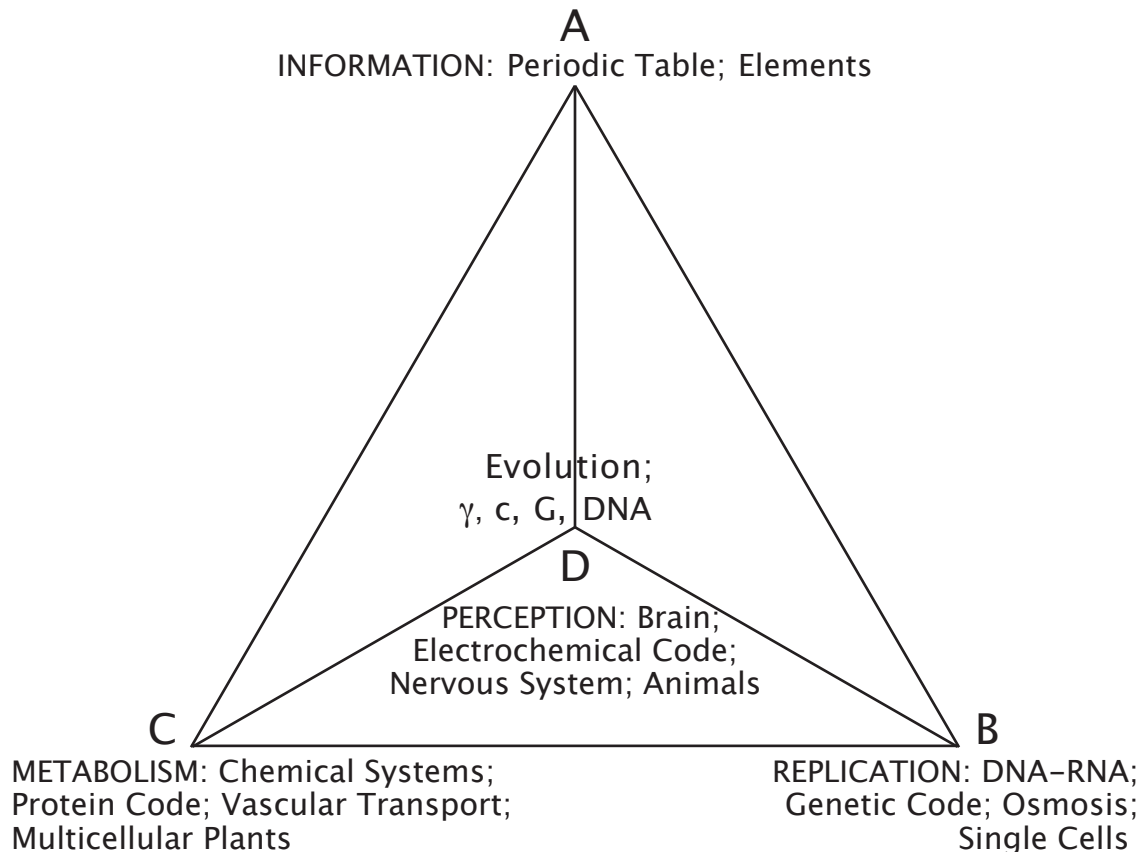
Fig. 5

# THE SYMMETRY GROUPS OF LIGHT: LIFE

## Electromagnetic Ground State (chemical interactions only)

Life, Biology, Animate Information, Consciousness.

The Universe awakens to and explores itself. The Body and Brain Electric.  
Life is the sacred mystery of the Universe and the Electromagnetic Domain.



John A. Gowan and August T. Jaccaci

Feb.-Apr. 2013

<http://www.johnagowan.org/information.html>

- A. Asymmetric information field of matter (source: symmetry debts and groups of light). Nuclear and electron shell electric/magnetic information. Force fields, long-range transmission at "velocity c"; elements of the Periodic Table.
- B. RNA-DNA amino acid information field, single cells. Competition for survival; self, identity. Diffusion of molecular information (very slow); evolution.
- C. Integrated metabolic chemical systems; Photosynthesis (energy capture, storage, exchange). Protein chemical code (enzymes, auxins, hormones). Organisms, plants, species (closed genome). Vascular transport of chemical information (slow); evolution.
- D. Integrated perceptual systems, electrical nervous systems, consciousness, self-awareness. Finding food, mates, enemies, tools; thought, creativity. Electrochemical code; abstract codes (language). Electrochemical transmission of information via nerves (moderately fast). Computer and machine codes, etc. (light speed via EM waves and currents). Animals, social systems and ecosystems; evolution. (Gravity modifies the EM spatial metric via a temporal asymmetry, creating galaxies, stars, planets. See: [johnagowan.org/gravity.html](http://johnagowan.org/gravity.html))