Forms Of Real Molecular Structures

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Common Sense Science has made considerable progress on the FORMS computer program. FORMS is a computer simulation of the structure and movements inside real molecules, and development of FORMS is the top-priority research and development application of our revolutionary theories.

FORMS simulates the actual positions and motions of physical material particles. Real molecules, composed of electrons and protons, can be simulated using physical models and the CSS Theory of Electrodynamics Forces applied to our physical models of matter.

In the first application of FORMS, a neutron (the lightest and most simple molecule) is being analyzed by computation of potential energy and the forces between a neutron's two components. Depending upon the positions of the neutron's electron and proton, a neutron can be stable (see Figure 1) or unstable (see Figure 2).

For now, FORMS is being developed as a seven degree-of-freedom (7-DOF) simulation of each particle's location (3 degrees of freedom), angular orientation (3 degrees of freedom) and variable size or radius (1 degree of freedom). Only the three *locations* have been implemented as free variables in FORMS at this time.

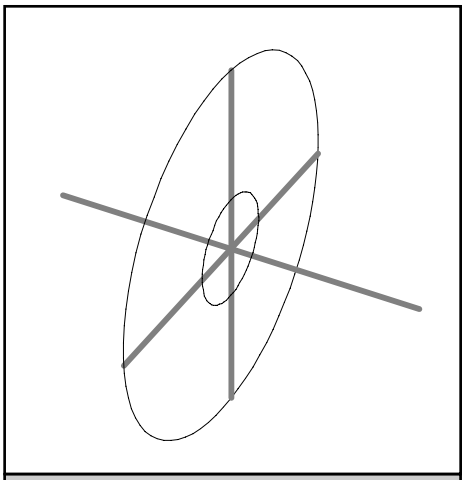

Figure 1. Stable Neutron Shown in Coplanar and Coaxial Configuration.

Positively charged proton (small ring) is attracted to the center of negatively charged electron.

Magnetic forces on proton make it move to capture maximum magnetic flux at the center of the electron.

FORMS computed a minimum energy potential for this configuration of stable neutrons (such as cosmic particles found in space).

Small movement of the proton out of the central region make the neutron unstable (see Figure 2).

Progress in software coding of development versions of FORMS has achieved these milestones:

- Most of the FORMS entities have been defined as arrays in the FORMS software, including
  - Helicons (electron, proton, positron, and anti-proton)
  - Molecules (the first "molecule" to be studied is the neutron)
  - Molecule Parts (one electron and one proton, comprising a neutron)

- Simulation Scope (simulation name and timing events of the simulation)
- Simulation (a set of data giving the results of the simulation for all time instances)

- Coding of equations that define the geometry of helicons, their relative positions and relative velocities

- Algorithms that compute:
  - Mutual potential energy between every pair of helicons
  - Change of potential energy for a small perturbation of position
  - Computation of the forces on each helicon at its current position
  - Computer-generated presentation of the simulation results:
    - Storage of simulation results in a library file
    - Graphical display of a sequence of simulations that show the dynamic motions of helicons for the duration of a simulation interval

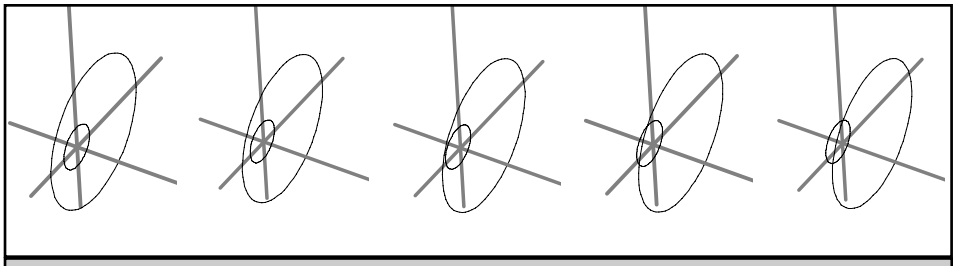

Figure 2. Unstable Neutron Shown at Five Time Instances. If the electron and proton are moved from their coaxial, coplanar positions (as shown at left), the forces between them cause the particles to separate (shown at right).