The New Nuclear Magic Number (34) Explained by the Polar Coaxial Ring System of Quantum FFF Theory.

Leo Vuyk,
Architect,
Rotterdam, the Netherlands.

Abstract,
Proposal for an atomic nuclear Polar-coaxial ring geometry, based on Magic Number logic, including the newest number of 34 nucleons found by RIBF/Riken Japan (October 2013).
The numerology of magic numbers was reason to do research on geometrical solutions for the shape and structural system of nucleons (protons and neutrons) inside atom nuclei.
I found interesting coaxial ring solutions, which were not only able to match the sequence of magic number numerology in a surprising way, but also able to explain the latest discovery of an extra magic number 34.

Proposal for a new 3-Dimensional nucleon system for atomic nuclei, based on magic numbers; 8,20,28,50,82, and126. (and in addition 34: reference: [40])
Magic numbers are assumed to be in action for the atomic nuclear system of protons as well as neutrons.

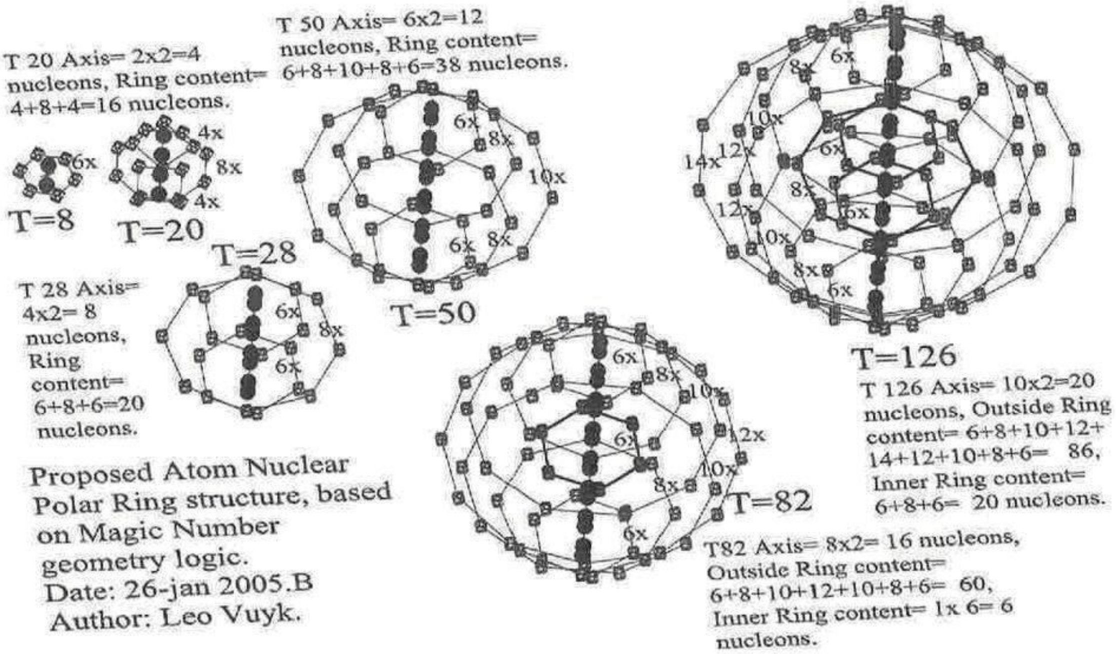

Figure: 1, the polar coaxial nucleon ring concept of 2005.

The structure of each atomic magic numbered nucleus is supposed to have one polar central axis equipped with an even number of nucleons, in combination with one, two or three equatorial symmetric coaxial ring systems.
In principle, there are TWO ring systems possible in a symmetric co-axial ring system located around the central axis: coined an INNER and an OUTER RING system.

The magic numbers: T=82 and T=126 seem to be equipped with this inner ring system.
However, if T=184 then a second inner ring should be present.
The rules are:
For magic numbered nuclei:
The existence of a linear shaped axis of an even numbered string of nucleons.
The axis symmetrical oriented even numbered strings of nucleons in ring shape, perpendicular oriented to the central nucleon axis.
The whole nuclear geometry, all together in more or less globular shape and as such with axis- and equatorial symmetry.
If the nucleon number of 82 is reached, an additional equatorial "inner" ring of 6 nucleons is present.
For 126 nucleons this number is raised to 20 nucleons divided into three rings with 6,8,and 6 nucleons.
For non magic numbered nuclei:
The existence of a linear shaped axis of an even/or ODD numbered string of nucleons.
The axis symmetrical oriented even/or ODD numbered strings of nucleons in ring shape, perpendicular oriented to the central nucleon axis.
The whole nuclear geometry, all together in more or less globular shape and as such with axis- and equatorial symmetry.
If the nucleon number of 82 is reached, an additional equatorial "inner" ring of 6 nucleons is present.

For 126 nucleons this number is raised to 20 nucleons divided into three rings with 6,8,and 6 nucleons.
Overview of the system:
For **T=8** we count the nucleons (dots) from top to bottom:
On the axis = 2 nucleons
On the single ring: 6 nucleons
For **T=20**, we count dots from top to bottom:
On the axis =4 nucleons
On the three (3) rings: 4,8,4 = 16 nucleons
(4+16=20)
ALTERNATIVE:
For **T=20**, we could even count from top to bottom:
On the axis =6 nucleons
On the three (3) rings: 4,6,4 = 14 nucleons
(6+14=20)
According to my two kinds of nuclear structure of the T=20 nucleus, I would expect that there are two kinds of Calcium (z=20) atoms. I am not a nuclear specialist, so I am not able to point into examples for calcium.
The only hint I would give is that inside double magic Calcium (20protons+28 neutrons)

I would expect that the proton structure should have an axial amount of 6 protons, combined with three rings of 4,6,4 nucleons.
Why? because the T=28 neutron nucleus has an axis of 8 neutrons and three rings of 6,8,6 neutrons, which gives maximum space for the proton nucleus
For **T=28**, we count dots from top to bottom:
On the axis =8 nucleons
On the three (3) rings: 6,8,6 = 20 nucleons
(8+20=28)
For **T=50**, we count dots from top to bottom:
On the axis =12 nucleons
On the five rings: 6,8,10,8,6,= 38 nucleons
(12+38=50)
For **T=82**, we count dots from top to bottom:
On the axis =16 nucleons
On the seven (7) OUTER rings: 6,8,10,12,10,8,6,= 60 nucleons
On the single (1) INNER ring: =6 nucleons
(16+60+6=82)
For **T=126**, we count dots from top to bottom:
On the axis = 20 nucleons
On the nine (9) OUTER rings: 6,8,10,12,14,12,10,8,6,= 86 nucleons
On the three (3) INNER ring: =6,8,6=20 nucleons.
(20+86+20=126).

THE NEXT STEP:
For T=184, we count dots from top to bottom:
On the axis = 24 nucleons
On the nine (11) OUTER rings: 6,8,10,12,14,16,14,12,10,8,6,= 116 nucleons
On the three (5) INNER ring: =6,8,10,8,6=38 nucleons.
On the ONE extra INNER ring: =6
(24+116+38+6=184).

According to the foregoing systematic approach, THE NEXT STEP as new ISLAND OF STABILITY should HAVE 254 NUCLEON!!! See below::
For T=254, we count dots from top to bottom:
On the axis = 28 nucleons
On the nine (11) OUTER rings: 6,8,10,12,14,16,18,16,14,12,10,8,6,= 146 nucleons.
On the three (5) INNER ring: =6,8,10,12,10,8,6=60 nucleons.
On the ONE extra INNER ring: =6,8,6=20 nucleons.
(28+146+60+20=254).
Conclusion : between 126-184 and 254, based on this system, there is no reason to expect real islands of stability.

The new Magic number (34) fitting in the Polar Coaxial Ring (PCR) Model, by an extra nucleon ring of 6 nucleons. (see below).

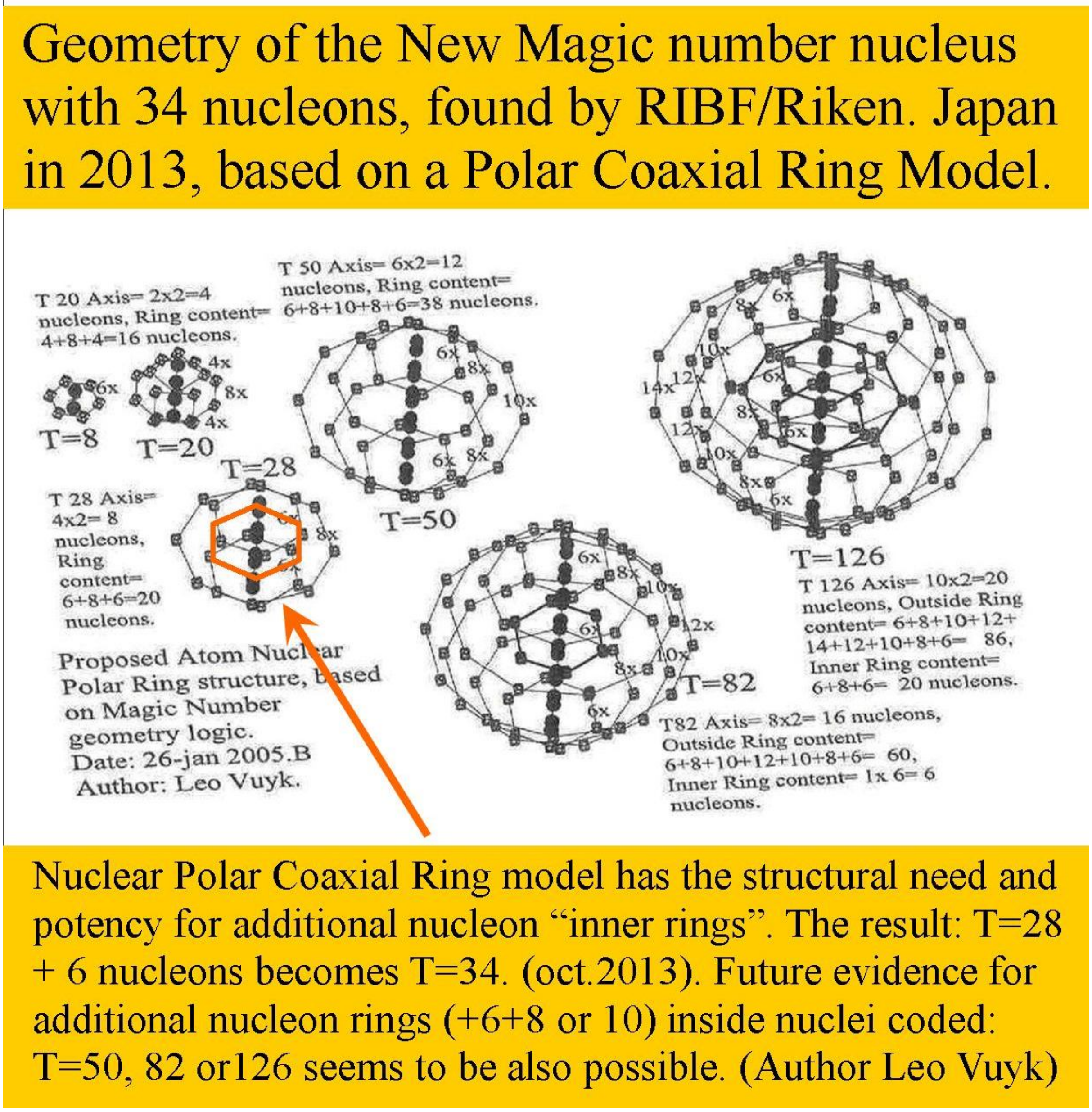

Figure: 2, The coaxial ring structures with the additional inner ring to form a 34 nucleon system equipped qith equatorial symmetry.

Indications for superheavy elements:
Newscientist; 2011 preview: **No 'magic' element just yet.**
http://www.newscientist.com/article/mg20827923.500-2011-preview-no-magic-element-justyet.
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Elements occupying the far depths of the periodic table are so exotic and ephemeral it seems as if they are only barely there. In early 2010, when physicists announced the creation of the superheavy element ununseptium, even the handful of atoms that were made decayed into smaller ones in a fraction of a second.
Theory predicts, however, that superheavy isotopes with lifetimes of minutes can be made. These might have novel properties. What's more, they would confirm the existence of the fabled "island of stability",

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