

## Significant comments

#	Description	Link to source/ comments
1	Proton and neutron consist of a core and two shells around them	Robert Hofstadter the Nobel laureate
2	The proton consists of two quarks "u" and a quark "d"	Murray Gell-Mann the Nobel laureate, and George Zweig
3	The neutron consists of two quarks "d" and a quark "u"	Murray Gell-Mann the Nobel laureate, and George Zweig
4	"Conditional quark" consists of a core and two shells	The assumption of the author
5	Quark radius "- (0.47 · 10E-16 cm) <sup>2</sup> < RE <sup>2</sup> < (0.43 · 10E-16 cm) <sup>2</sup> "	<a href="https://arxiv.org/pdf/1604.01280.pdf">https://arxiv.org/pdf/1604.01280.pdf</a>
6	Proton, a neutron can be represented as the sum of three matrices	The mathematical derivation of the author
7	{x1, x2, x3, 0, 0} + {0, y1, y2, y3, 0} + {0, 0, x1, x2, x3}	View of three matrices for obtaining a proton, neutron
8	x1, y1 - quark cores	Usually, quarks proper in today's a view
9	{x1, x2+y1, x3+y2+x1, y3+x2, x3}	A schematic view of the matrix for a proton, neutron
10	{x1, x2+y1, x3+y2+x1} - quark core	x1, y1 - quark cores
11	{y3+x2, x3} - quark shells	x1, y1 - absent
12	The proposed approach allows one to obtain many different particles, including pseudo particles	This program does not include their calculation

Values of quarks 'u' and 'd' by shells in Qe (electron charges)

#	Index	Charge in the Qe
1	uq1	0.06666666666666665
2	uq2	0.5
3	uq3	0.15
4	dq1	0.06666666666666665
5	dq2	-0.5
6	dq3	0.15

Values of quarks "u" by shells

#	Charge sym.	Charge in Cl	Mass sym.	Mass in kg.	Volume sym.	Volume in cbm
1	uq11	1.0681177472653331e-20	um1	4.477669835812132e-28	uv1	-2.560432919260719e-44
2	uq21	8.01088310449e-20	um2	2.6285989484434786e-29	uv2	1.1428590474984059e-44
3	uq31	2.403264931347e-20	um3	1.2424998364766522e-28	uv3	5.402125647480323e-44

Values of quarks "d" by shells

#	Charge sym.	Charge in Cl	Mass sym.	Mass in kg.	Volume sym.	Volume in cbm
1	dq11	1.0681177472653331e-20	dm1	4.49693787663576e-28	dv1	-2.5604329192607184e-44
2	dq21	-8.01088310449e-20	dm2	2.632222259979773e-29	dv2	1.1428590474984059e-44
3	dq31	2.403264931347e-20	dm3	1.2442125222380227e-28	dv3	5.402125647480323e-44

Detailed description for proton by shells

#	Charge sym.	Charge in Cl	Mass sym.	Mass in kg.	Volume sym.	Volume in cbm
1	pq1	1.0681177472653331e-20	pm1	4.477669835812132e-28	pv1	-2.560432919260719e-44
2	pq2	8.01088310449e-20	pm2	2.6285989484434786e-29	pv2	1.1428590474984059e-44
3	pq3	1.0681177472653331e-20	pm3	4.49693787663576e-28	pv3	-2.5604329192607184e-44
4	pq4	2.403264931347e-20	pm4	1.2424998364766522e-28	pv4	5.402125647480323e-44
5	pq5	1.0681177472653331e-20	pm5	4.477669835812132e-28	pv5	-2.560432919260719e-44

6	pq6	-8.01088310449e-20	pm6	2.632222259979773e-29	pv6	1.1428590474984059e-44	
7	pq7	2.403264931347e-20	pm7	1.2442125222380227e-28	pv7	5.402125647480323e-44	
8	pq8	8.01088310449e-20	pm8	2.6285989484434786e-29	pv8	1.1428590474984059e-44	
9	pq9	2.403264931347e-20	pm9	1.2424998364766522e-28	pv9	5.402125647480323e-44	
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Detailed description for neutron, by shells

#	Charge sym.	Charge in Cl	Mass sym.	Mass in kg.	Volume sym.	Volume in cbm	
+---+-----+-----+-----+-----+-----+-----+							
1	nq1	1.0681177472653331e-20	nm1	4.49693787663576e-28	nv1	-2.5604329192607184e-44	
2	nq2	-8.01088310449e-20	nm2	2.632222259979773e-29	nv2	1.1428590474984059e-44	
3	nq3	1.0681177472653331e-20	nm3	4.477669835812132e-28	nv3	-2.560432919260719e-44	
4	nq4	2.403264931347e-20	nm4	1.2442125222380227e-28	nv4	5.402125647480323e-44	
5	nq5	1.0681177472653331e-20	nm5	4.49693787663576e-28	nv5	-2.5604329192607184e-44	
6	nq6	8.01088310449e-20	nm6	2.6285989484434786e-29	nv6	1.1428590474984059e-44	
7	nq7	2.403264931347e-20	nm7	1.2424998364766522e-28	nv7	5.402125647480323e-44	
8	nq8	-8.01088310449e-20	nm8	2.632222259979773e-29	nv8	1.1428590474984059e-44	
9	nq9	2.403264931347e-20	nm9	1.2442125222380227e-28	nv9	5.402125647480323e-44	
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Values of quarks 'u' and 'd' by  
shells in Qe (electron charges)  
for pseudo particles

#	Index	Charge in the Qe	
+---+-----+-----+			
1	psuq1	1.166666666666667	
2	psuq2	-0.6500000000000001	
3	psuq3	0.15	
4	psdq1	-0.8333333333333334	
5	psdq2	0.35	
6	psdq3	0.15	
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Values of quarks "u" by shells for pseudo particles

#	Charge sym.	Charge in Cl	Mass sym.	Mass in kg.	Volume sym.	Volume in cbm	
+---+-----+-----+-----+-----+-----+-----+							
1	psuq11	1.8692060577143335e-19	psum1	5.302786252707322e-28	psuv1	1.0409841790594949e-44	

2	psuq21	-1.0414148035837002e-19	psum2	-9.792776104786757e-29	psuv2	-4.2592665999819155e-44
3	psuq31	2.4032649313470004e-20	psum3	1.2442125222380227e-28	psuv3	5.402125647480323e-44
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Values of quarks "d" by shells for pseudo particles

#	Charge sym.	Charge in Cl	Mass sym.	Mass in kg.	Volume sym.	Volume in cbm
+---+-----+-----+-----+-----+-----+-----+						
1	psdq11	-1.3351471840816668e-19	psdm1	5.329629698883688e-28	psdv1	1.0409841790594973e-44
2	psdq21	5.607618173143e-20	psdm2	-9.813526273936748e-29	psdv2	-4.259266599981917e-44
3	psdq31	2.403264931347e-20	psdm3	1.2424998364766522e-28	psdv3	5.402125647480323e-44
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Detailed description for pseudo proton by shells

#	Charge sym.	Charge in Cl	Mass sym.	Mass in kg.	Volume sym.	Volume in cbm
+---+-----+-----+-----+-----+-----+-----+						
1	pspq1	1.8692060577143335e-19	pspm1	5.302786252707322e-28	pspv1	1.0409841790594949e-44
2	pspq2	-1.0414148035837002e-19	pspm2	-9.792776104786757e-29	pspv2	-4.2592665999819155e-44
3	pspq3	-1.3351471840816668e-19	pspm3	5.329629698883688e-28	pspv3	1.0409841790594973e-44
4	pspq4	2.4032649313470004e-20	pspm4	1.2442125222380227e-28	pspv4	5.402125647480323e-44
5	pspq5	1.8692060577143335e-19	pspm5	5.302786252707322e-28	pspv5	1.0409841790594949e-44
6	pspq6	5.607618173143e-20	pspm6	-9.813526273936748e-29	pspv6	-4.259266599981917e-44
7	pspq7	2.403264931347e-20	pspm7	1.2424998364766522e-28	pspv7	5.402125647480323e-44
8	pspq8	-1.0414148035837002e-19	pspm8	-9.792776104786757e-29	pspv8	-4.2592665999819155e-44
9	pspq9	2.4032649313470004e-20	pspm9	1.2442125222380227e-28	pspv9	5.402125647480323e-44
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Detailed description for pseudo neutron by shells

#	Charge sym.	Charge in Cl	Mass sym.	Mass in kg.	Volume sym.	Volume in cbm
+---+-----+-----+-----+-----+-----+-----+						
1	psnq1	-1.3351471840816668e-19	psnm1	5.329629698883688e-28	psnv1	1.0409841790594973e-44
2	psnq2	5.607618173143e-20	psnm2	-9.813526273936748e-29	psnv2	-4.259266599981917e-44
3	psnq3	1.8692060577143335e-19	psnm3	5.302786252707322e-28	psnv3	1.0409841790594949e-44
4	psnq4	2.403264931347e-20	psnm4	1.2424998364766522e-28	psnv4	5.402125647480323e-44
5	psnq5	-1.3351471840816668e-19	psnm5	5.329629698883688e-28	psnv5	1.0409841790594973e-44
6	psnq6	-1.0414148035837002e-19	psnm6	-9.792776104786757e-29	psnv6	-4.2592665999819155e-44
7	psnq7	2.4032649313470004e-20	psnm7	1.2442125222380227e-28	psnv7	5.402125647480323e-44

	8		psnq8		5.607618173143e-20		psnm8		-9.813526273936748e-29		psnv8		-4.259266599981917e-44	
	9		psnq9		2.403264931347e-20		psnm9		1.2424998364766522e-28		psnv9		5.402125647480323e-44	
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