II.4a Les 23 Amas - Vortex constitutifs des atomes et éléments jusqu'au carbone.

Les valeurs d'équivalence (masse, énergie, charge, fréquence, longueur d'onde et température) sont données pour chaque amas « en couche pleine ».

Classification-amas (jcv2006)	Couche	Base: 12,2452987	m-e en eV	fréquence	long. d'onde
A.0-bruno (infrason)	0	1	1,088936E-15	2,6352E-01	1,1376E+09
A.1a /amorce/raie15nano°K	1	12,2452987	1,333435E-14	3,2269E+00	9,2904E+07
B.1b /ρ1,9nano°K - 40hz	2	149,9473403	1,632830E-13	3,9514E+01	7,5869E+06
C.1c /ρ480hz-620km	3	1836,149971	1,999450E-12	4,8387E+02	6,1958E+05
D.1d-a / ρsonBF	4	22484,20485	2,448386E-11	5,9251E+03	5,0597E+04
E.2b /ρultrason-3,5µ°K	5	275325,8044	2,998122E-10	7,2555E+04	4,1320E+03
F.2c/ ρradioOC	6	3371446,715	3,671289E-09	8,8845E+05	3,3743E+02
G2.d-a / ρHFradio	7	41284372,07	4,495604E-08	1,0879E+07	2,7556E+01
H.3b/ ρVHF-2,3m -6,4m°K	8	505539467,7	5,505001E-07	1,3322E+08	2,2503E+00
I.3c / raie ρH0,21m	9	6190481786	6,741038E-06	1,6313E+09	1,8377E-01
J.3d-a /radioton ν_e ρ1°K	10	7,580430E+10	8,254602E-05	1,9976E+10	1,5008E-02
K.4b/ ν_γ/µonde/raieHe1mm	11	9,282463E+11	1,010801E-03	2,4461E+11	1,2256E-03
L.4c /~ν_μ	12	1,136665E+13	1,237756E-02	2,9954E+12	1,0009E-04
M.4d-a /I. R. /~ν_τ	13	1,391881E+14	1,515669E-01	3,6679E+13	8,1734E-06
N.5b /**photon rouge**	14	1,704399E+15	1,855982E+00	4,4915E+14	6,6747E-07
O.5c /bleu vert **rydberg**	15	2,087088E+16	2,272705E+01	5,4999E+15	5,4508E-08
P.5d-a / amas UV.	16	2,555702E+17	2,782995E+02	6,7348E+16	4,4514E-09
Q.6b /amas UV. X	17	3,129533E+18	3,407861E+03	8,2470E+17	3,6352E-10
R.6c / Xton	18	3,832206E+19	4,173027E+04	1,0099E+19	2,9686E-11
S.6d-a/**électron-positron**	19	4,692651E+20	5,109997E+05	1,2366E+20	2,4243E-12
T.7b /méson **γ**	20	5,746292E+21	6,257343E+06	1,5143E+21	1,9798E-13
U.7c /muon **µ**	21	7,036506E+22	7,662304E+07	1,8543E+22	1,6168E-14
V.7d-a /**proton**/at/deuton	22	8,616412E+23	9,382720E+08	2,2706E+23	1,3203E-15
V.7d-a /at. de Bohr	22,001	8,621184E+23	9,387917E+08	2,2719E+23	1,3196E-15
V.7d-a /**atome H_1**	22,001	8,625877E+23	9,393027E+08	2,2731E+23	1,3189E-15
V.7d-a /at. '**neutron**'	22,001	8,630569E+23	9,398137E+08	2,2743E+23	1,3181E-15
W.8b*0,1 /at.deut. H2 (τ)	23,000	1,724237E+24	1,877583E+09	4,5438E+23	6,5979E-16
W.8b*0,2 /at.trit H3	23,000	2,588506E+24	2,818717E+09	6,8213E+23	4,3950E-16
W.8b*0,4 /at.He_4	23,000	3,451342E+24	3,758290E+09	9,0951E+23	3,2962E-16
W.8b*0,7 /at. Li_7	23,000	6,039848E+24	6,577007E+09	1,5916E+24	1,8836E-16
W.8b*0,85 /at.Be_9	23,000	7,765519E+24	8,456152E+09	2,0464E+24	1,4650E-16
W.8b*0,95 /at.B_{10}	23,000	9,491190E+24	1,033530E+10	2,5011E+24	1,1986E-16
W.8b*1 /**at.C_{12}**	23,000	1,035403E+25	1,127487E+10	2,7285E+24	1,0987E-16
W.8b/élémentsH2-C16/12	23	1,055105E+25	1,148942E+10	2,7804E+24	1,0782E-16

II.4b Les amas - Vortex supérieurs, constitutifs des agrégats et corps atomiques / moléculaires.

Les valeurs d'équivalence (masse, énergie, charge, fréquence, longueur d'onde et température) sont données pour chaque amas « en couche pleine ».

Classification-amas (jcv2006)	Couche	Base: 12,2452987	m-e en eV	fréquence	long. d'onde
W.8b/élémentsH2-C16/12	23	1,055105E+25	1,148942E+10	2,7804E+24	1,0782E-16
X.8c*0,1 /at.N14	24,000	1,207970E+25	1,315401E+10	3,1833E+24	9,4178E-17
X.8c*0,2 /at.O16	24,000	1,380537E+25	1,503316E+10	3,6380E+24	8,2405E-17
X8.c*0,3 /at.CF18	24,000	1,553104E+25	1,691230E+10	4,0928E+24	7,3249E-17
X8.c*0,4 /at.Ne20	24,000	1,725671E+25	1,879145E+10	4,5475E+24	6,5924E-17
X.8c*0,7 /pseudo W	24,000	7,386573E+25	8,043505E+10	1,9465E+25	1,5401E-17
X.8c*0,8 /**pseudo Z**	24,000	8,441798E+25	9,192577E+10	2,2246E+25	1,3476E-17
X.8c /élém. 7-61/145	24	1,292008E+26	1,406914E+11	3,4047E+25	8,8052E-18
Y.8d-a*0,2 /**pseudo top**	25,000	1,643124E+26	1,789257E+11	4,3300E+25	6,9236E-18
Y.8d-a/élém62-120/300	25	1,582102E+27	1,722808E+12	4,1692E+26	7,1907E-19
Z.9b*0,3 /**pseudo higgs**	26,000	4,477218E+27	4,875404E+12	1,1798E+27	2,5409E-19
Z.9b /mol. **1ières cellules**	26	1,937332E+28	2,109630E+13	5,1053E+27	5,8722E-20
AA.9c /cellules	27	2,372320E+29	2,583305E+14	6,2516E+28	4,7955E-21
AB.9d-a	28	2,904977E+30	3,163334E+15	7,6553E+29	3,9162E-22
AC.10b	29	3,557231E+31	3,873597E+16	9,3741E+30	3,1981E-23
AD.10c	30	4,355936E+32	4,743335E+17	1,1479E+32	2,6117E-24
AE.10d-a	31	5,333974E+33	5,808356E+18	1,4056E+33	2,1328E-25
AF.11b	32	6,531610E+34	7,112505E+19	1,7212E+34	1,7417E-26
AG.11c	33	7,998152E+35	8,709475E+20	2,1077E+35	1,4224E-27
AH.11d-a	34	9,793976E+36	1,066501E+22	2,5809E+36	1,1616E-28
AI.12b	35	1,199302E+38	1,305963E+23	3,1604E+37	9,4858E-30
AJ.12c	36	1,468581E+39	1,599190E+24	3,8700E+38	7,7465E-31
AK.12d-a	37	1,798321E+40	1,958256E+25	4,7390E+39	6,3261E-32
AL.13b	38	2,202098E+41	2,397943E+26	5,8030E+40	5,1661E-33
AM.13c	39	2,696534E+42	2,936353E+27	7,1060E+41	4,2189E-34
AN.13d-a	40	3,301987E+43	3,595652E+28	8,7015E+42	3,4453E-35
AO.14b	41	4,043381E+44	4,402983E+29	1,0655E+44	2,8136E-36
AP.14c	42	4,951241E+45	5,391585E+30	1,3048E+45	2,2977E-37
AQ.14d-a /**foudre boule**	43	6,062943E+46	6,602156E+31	1,5977E+46	1,8764E-38
AR.15b*0,855/~**moleLi_5**	44,000	5,192853E+47	5,654684E+32	1,3684E+47	2,1908E-39
AR.15b	44	7,424255E+47	8,084538E+32	1,9565E+47	1,5323E-39
AS.15c	45	9,091222E+48	9,899758E+33	2,3957E+48	1,2514E-40
AT.15d-a /~1kg m/e	46	1,113247E+50	1,212255E+35	2,9337E+49	1,0219E-41