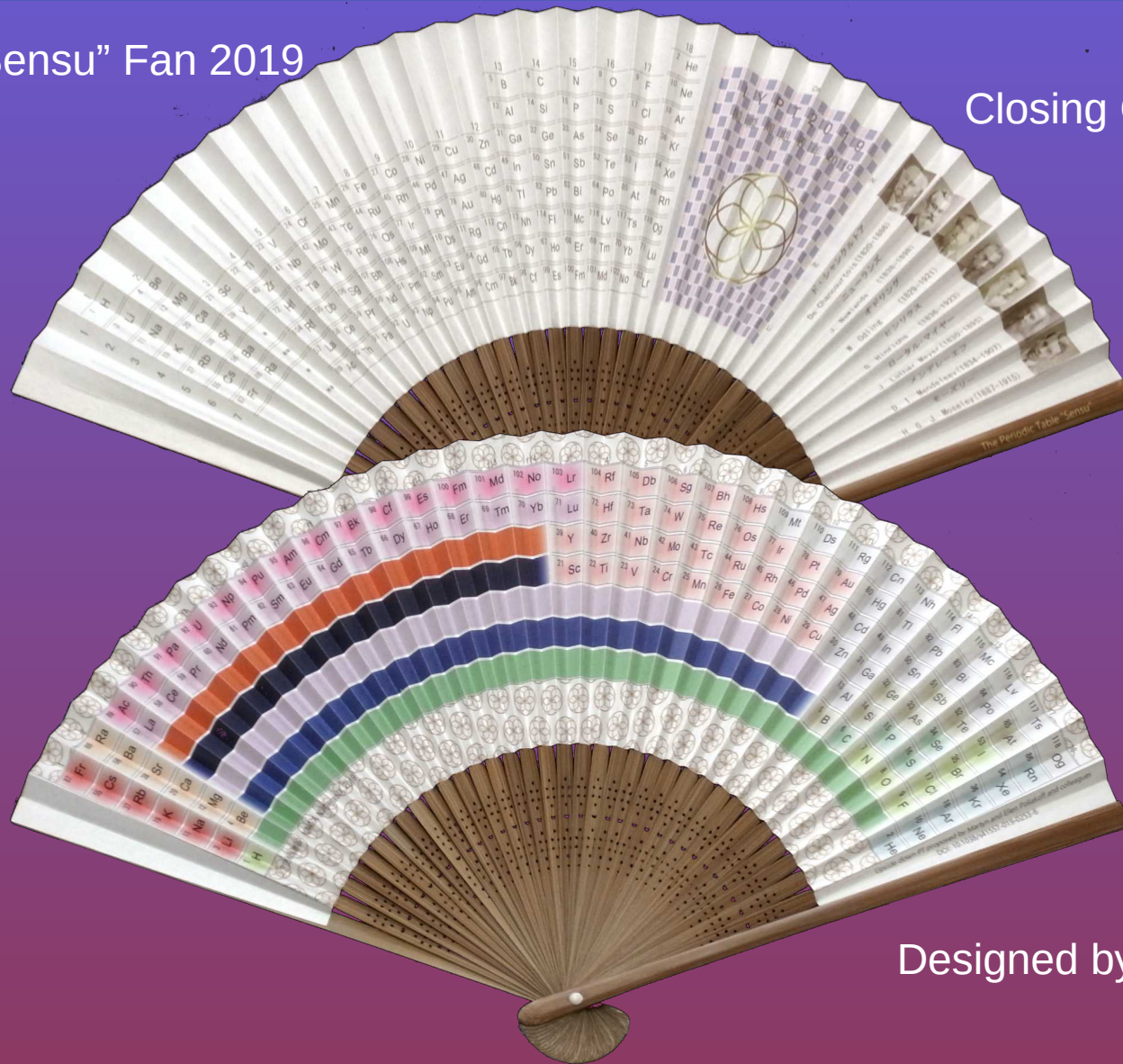


Periodic Table “Sensu” Fan 2019

IYPT 2019
Closing Ceremony in Tokyo

5th December 2019



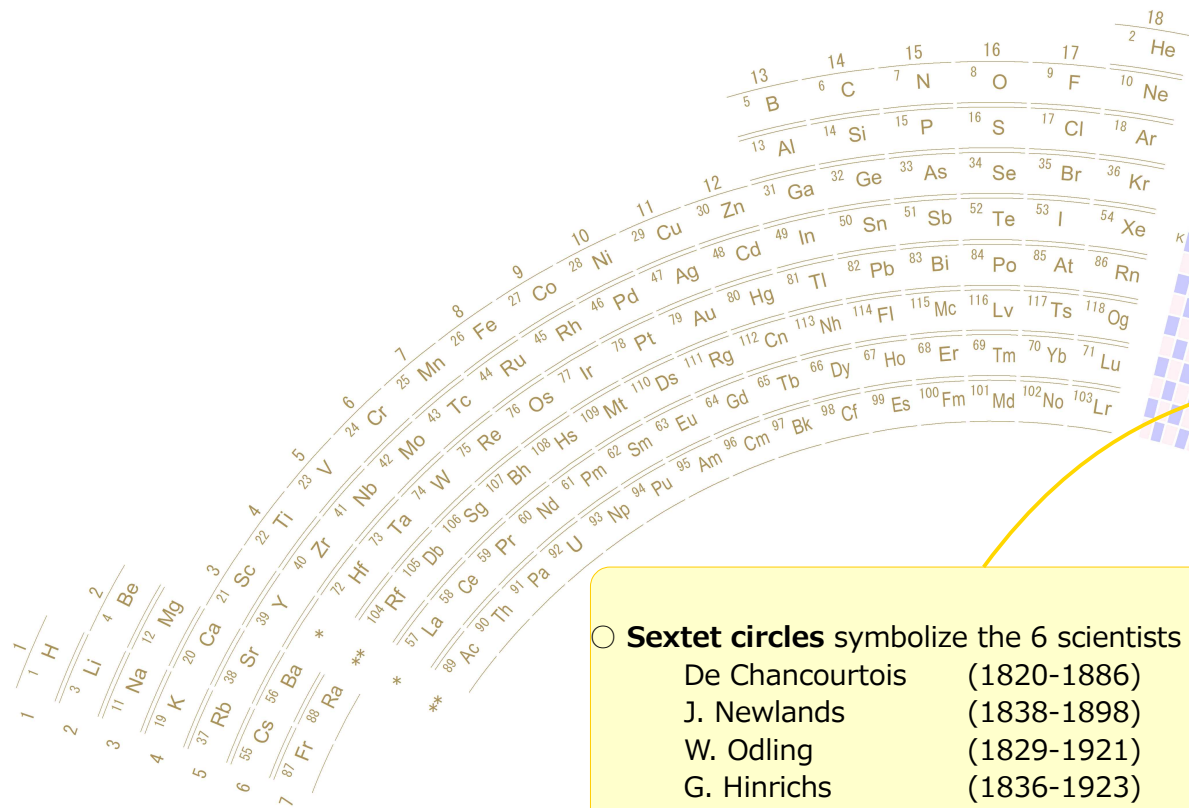
Designed by Nawa, Nagayasu

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Periodic Table “Sensu” Fan 2019

Side A: 18 column PT

the symbol circles on
‘ichimatsu’ checks



18

2 He

13 B 14 C 15 N 16 O 17 F 18 Ne

13 Al 14 Si 15 P 16 S 17 Cl 18 Ar

31 Ga 32 Ge 33 As 34 Se 35 Br 36 Kr

49 In 50 Sn 51 Sb 52 Te 53 I 54 Xe

81 Tl 82 Pb 83 Bi 84 Po 85 At 86 Rn

113 Nh 114 Fl 115 Mc 116 Lv 117 Ts 118 Og

67 Dy 68 Er 69 Tm 70 Yb 71 Lu

99 Es 100 Fm 101 Md 102 No 103 Lr

104 Rf 105 Db 106 Sg 107 Bh 108 Hs 109 Mt 110 Ds 111 Rg 112 Cn 113 Nh 114 Fl 115 Mc 116 Lv 117 Ts 118 Og

72 Hf 73 Ta 74 W 75 Re 76 Os 77 Ir 78 Pt 79 Au 80 Hg 81 Tl 82 Pb 83 Bi 84 Po 85 At 86 Rn

44 Ru 45 Rh 46 Pd 47 Ag 48 Cd 49 In 50 Sn 51 Sb 52 Te 53 I 54 Xe

26 Fe 27 Co 28 Ni 29 Cu 30 Zn 31 Ga 32 Ge 33 As 34 Se 35 Br 36 Kr

8 Cu 9 Ni 10 Cu 11 Zn 12 Ga 13 Ge 14 As 15 Se 16 Br 17 Kr

4 Ti 5 V 6 Cr 7 Mn 8 Fe 9 Co 10 Ni 11 Cu 12 Zn 13 Ga 14 Ge 15 As 16 Se 17 Br 18 Kr

2 Sc 3 Ti 4 V 5 Cr 6 Mn 7 Fe 8 Co 9 Ni 10 Cu 11 Zn 12 Ga 13 Ge 14 As 15 Se 16 Br 17 Kr

1 Li 2 Be 3 Li 4 Be 5 Na 6 Mg 7 K 8 Ca 9 Sc 10 Ti 11 V 12 Cr 13 Mn 14 Fe 15 Co 16 Ni 17 Cu 18 Zn 19 Ga 20 Ge 21 As 22 Se 23 Br 24 Kr

1 H 2 He 3 Li 4 Be 5 Na 6 Mg 7 K 8 Ca 9 Sc 10 Ti 11 V 12 Cr 13 Mn 14 Fe 15 Co 16 Ni 17 Cu 18 Zn 19 Ga 20 Ge 21 As 22 Se 23 Br 24 Kr

11 Na 12 Mg 13 Al 14 Si 15 P 16 S 17 Cl 18 Ar

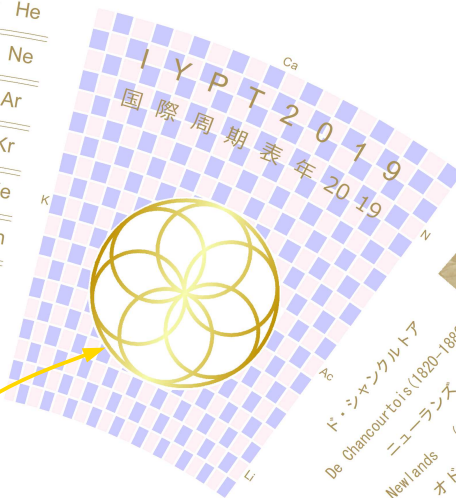
19 K 20 Ca 21 Sc 22 Ti 23 V 24 Cr 25 Mn 26 Fe 27 Co 28 Ni 29 Cu 30 Zn 31 Ga 32 Ge 33 As 34 Se 35 Br 36 Kr

37 Rb 38 Sr 39 Y 40 Zr 41 Nb 42 Mo 43 Tc 44 Ru 45 Rh 46 Pd 47 Ag 48 Cd 49 In 50 Sn 51 Sb 52 Te 53 I 54 Xe

55 Cs 56 Ba 57 La 58 Ce 59 Pr 60 Nd 61 Pm 62 Sm 63 Eu 64 Gd 65 Tb 66 Dy 67 Er 68 Tm 69 Yb 70 Lu

87 Fr 88 Ra 89 Ac 90 Th 91 Pa 92 U 93 Np 94 Pu 95 Am 96 Cm 97 Bk 98 Cf 99 Es 100 Fm 101 Md 102 No 103 Lr

- **Sextet circles** symbolize the 6 scientists
De Chancourtois (1820-1886)
J. Newlands (1838-1898)
W. Odling (1829-1921)
G. Hinrichs (1836-1923)
J. Lothar Meyer (1830-1895)
D. I. Mendeleev (1834-1907)
- **Outer circle** symbolizes the discoverer of atomic number
H. G. J. Moseley (1887-1915)



Scientists'
portraits

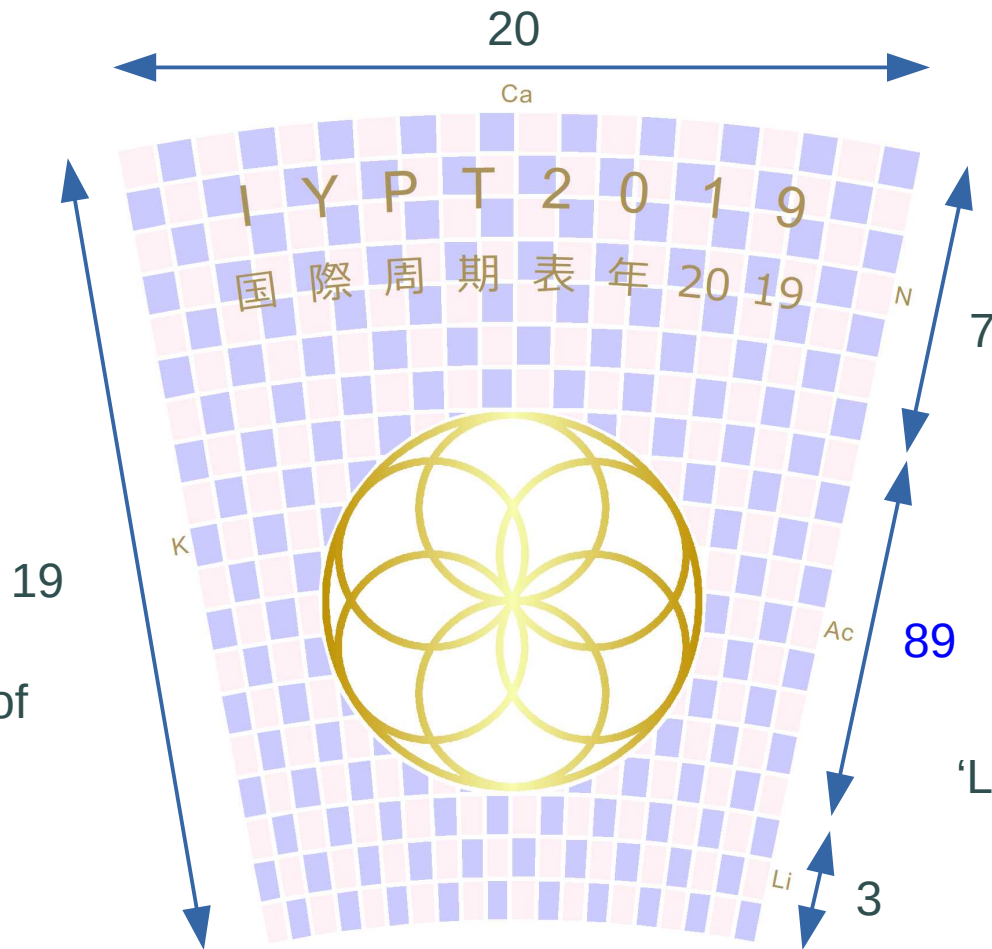


Periodic Table “Sensu” Fan 2019

The meaning of the ‘ichimatsu’ checks:

2019

The symbol circles of
the Scientists



1869

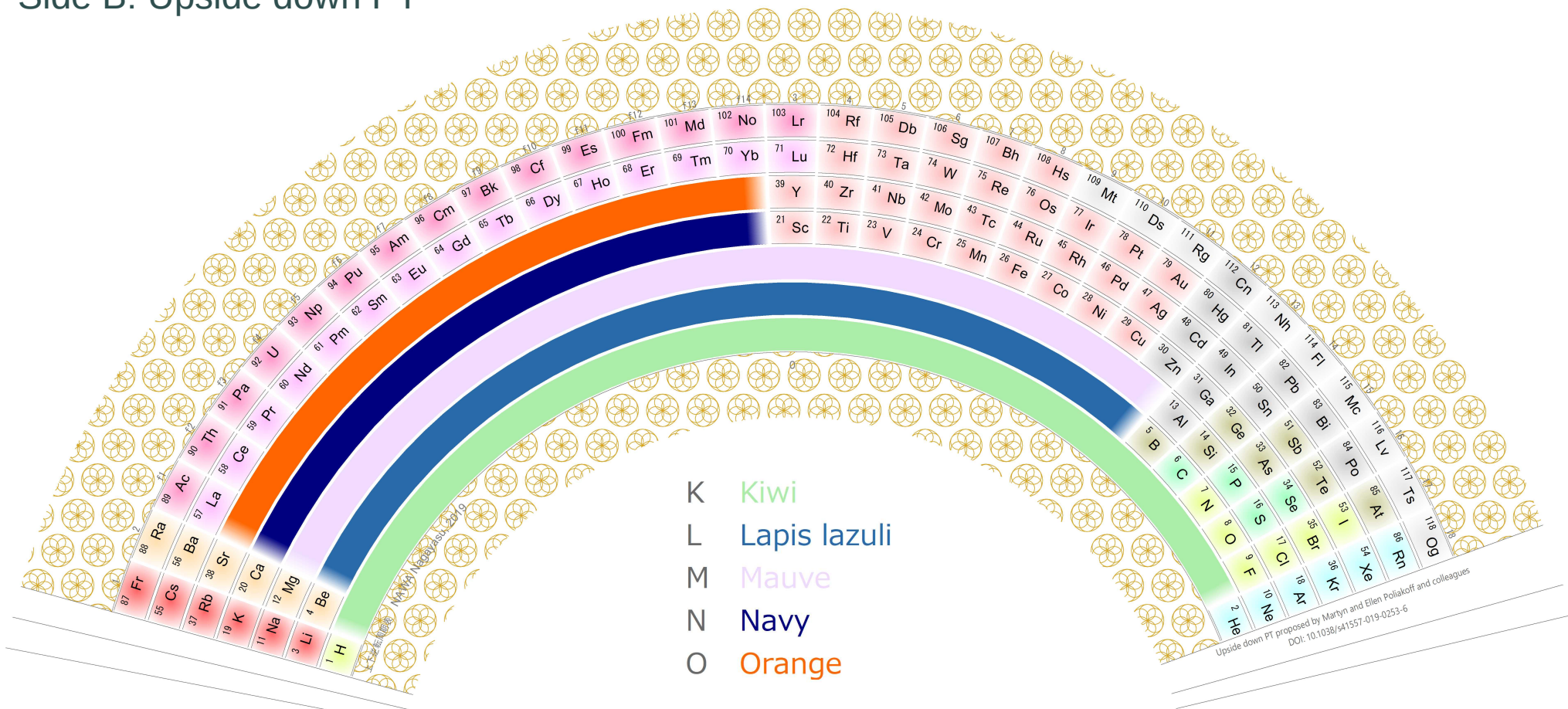
$$\text{Li} \cdot \text{N} \cdot \text{Ac} \\ 3 \times 7 \times 89 = 1869$$

$$F_{11} = 89 \\ (\text{Fibonacci number})$$

‘LiNac’ : Linear Accelerator

Periodic Table “Sensu” Fan 2019

Side B: Upside down PT



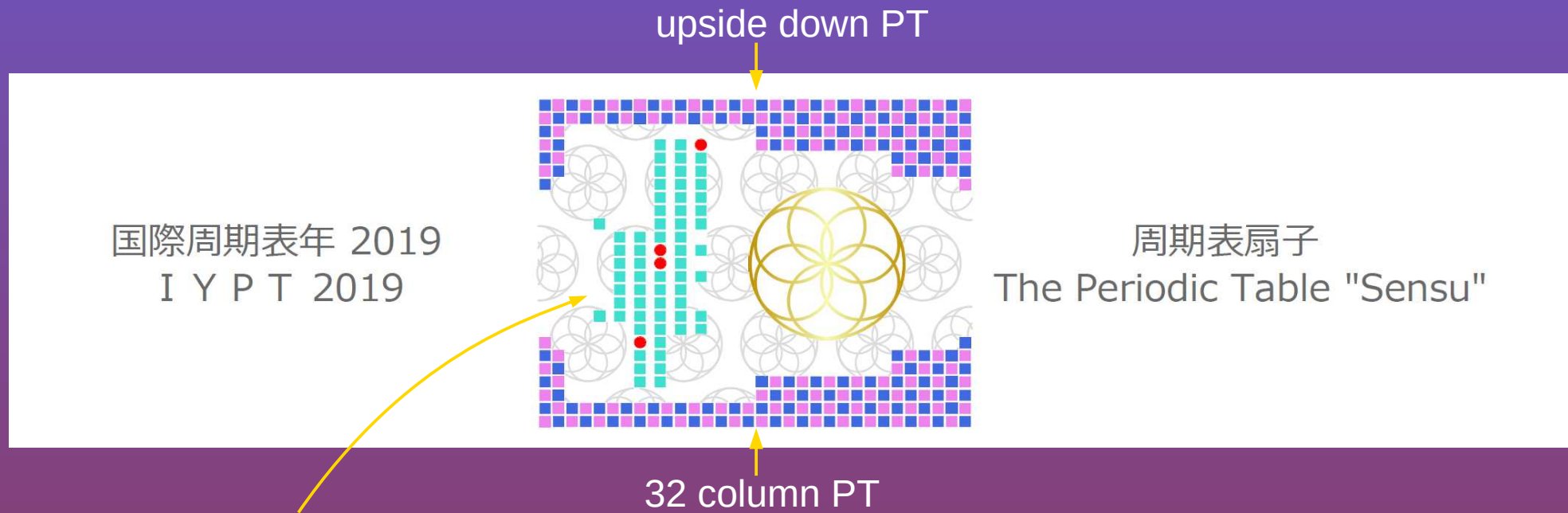
Upside down PT proposed by Martyn and Ellen Poliakoff and colleagues

DOI: 10.1038/s41557-019-0253-6

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The plan of the ‘*noshi*’ wrapping paper:



Mendeleev's the first PT, 1869 in the Hermitage Museum symbol colour.
“●” means “?” in the PT.