

Catalan numbers and topological layers of the spacetime membrane.

The direction of the enfolding gives other combinations of layers (properties)

Legend: (x): means the number of layers in a holon
 -> : means the direction of penetration
 (i.e. 1->3B: the basic membrane pelastrates holon 3B)
 Third expression: the name of the holon (i.e.2* or 5D)

	0 (1) 1 (basic membrane)		1 (3) 2*	
1				
2				
3		x->1 2*->1 (5) 3A		1->x 1->2* (7) 3B
4	x->1 3A->1 (7) 4A	1->x 1->3A (11) 4B	x->x 2*->2* (9) 4E	x->1 3B->1 (9) 4C 1->3B (15) 4D
5	x->1 4A->1 (9) 5A x->y 3A->2* (11) 5K	1->x x->1 1->4A (15) 5B 4B->1 (13) 5C 1->4B (23) 5D y->x 2*->3A (13) 5L	x->1 4E->1 (11) 5i 1->x 1->4E (19) 5J	1->x x->1 4C->1 (11) 5E 1->4C (19) 5F 4D->1 (17) 5G 1->4D (31) 5H y->x 3B->2* (13) 5M 2*->3B (17) 5N
6	x->1 5A->1 (11) 6A 1->x 1->5A (19) 6B	1->x x->1 1->5A (17) 6C 5C->1 (15) 6E 5D->1 (25) 6G 1->5B (31) 6D 1->5C (27) 6F 1->5D (47) 6H	5i->1 (13) 6Q 1->5i (23) 6R 5J->1 (21) 6S 1->5J (39) 6T	5E->1 (13) 6i 1->5E (23) 6J 5F->1 (21) 6K 1->5F (39) 6L 5G->1 (19) 6M 1->5G (35) 6N 5H->1 (33) 6O 1->5H (63) 6P
	5K->1 (13) 6U 1->5K (23) 6V	5L->1 (15) 6W 1->5L (27) 6X	5M->1 (15) 6Y 1->5M (27) 6Z	5N->1 (19) 6AA 1->5N (35) 6AB
	4A->2* (13) 6AC 2*->4A (17) 6AD	4B->2* (17) 6AE 2*->4B (25) 6AF	4C->2* (15) 6AG 4E->2* (15) 6AK 2*->4E (21) 6AL	4D->2* (21) 6AI 2*->4C (21) 6AH 2*->4D (33) 6AJ
	3A->3B (19) 6AN	3A->3A (15) 6AM 3B->3B (21) 6AO	3B->3A (17) 6AP	

number of steps in folding