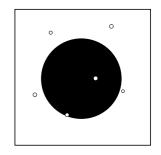
## On the Subject of Kugelblitz

Succumbthevoid

This module will display a dark orb with seven coloured particles spinning around it rapidly. The particles are either brighter (1) or darker (0) in colour. For each solve take the binary values of all the colours in rainbow order. XOR this binary string with the previous (if possible) to



obtain your new binary string. When you obtain the last converted binary string, convert it to base-7. If the number is three digits discard the first. This new value is your starting coordinate formulated as XY with (0, 0) being top left.

When this module is ready to be solved, the particles will slow down drastically and turn either white, or a pure rainbow colour. They will also pulse black every three seconds. Starting with north go clockwise 45 degrees for each coloured particle on the module to obtain your initial direction.

## Iterating a Kugelblitz

Use the process below to obtain your numbers. The table (found on the second page) is wrap-around like a klein bottle: wrapping around north and south flips the table around the vertical axis and wrapping around east and west flips the table around the horizontal axis. Stop when you obtain 7 digits.

- 1. Start at the starting coordinate facing in the starting direction on the table. n is initially 0.
- 2. Add the value of the position you are on to the current value and go forward in your direction one step.
- 3. Repeat previous process another n times.
- 4. Modulo the resulting value by 7 to obtain a digit.
- 5. Rotate 135 degrees counterclockwise if your base-7 number initially had three digits and 135 degrees clockwise otherwise.
- 6. Set your value back to 0, add 1 to n and return to step 2.

Catenate your digits and convert this from base-7 to binary. If this binary string is 19 digits long or less, prepend with 0's until it has 20 digits and then replace the first digit with a 1.

For each digit evaluate the following expressions and append the characters to a string. If there is no character at a referred position it is not an 'i', nor a 'p'.

- If this digit is a 0
  - If the previous character was not a 'p', or the amount of ocurrences of 'i' is odd and the previous two characters were not both a 'p', your next character is a 'p'. Otherwise, your next character is an 'i'.
- If this digit is a l
  - If the previous three characters were not all an 'i', your next character is an 'i'. Otherwise, your next character is a 'p'.

If there is an odd amount of occurences of the letter 'i' in your sequence, append an 'i' directly to the end of the sequence.

For every 'p', wait a pulse and for every 'i', toggle between holding and not holding the orb while staying within that pulse.

If this has been done correctly, the orb will decay and turn green. On a strike, the module will display the binary sequence you should have obtained. On pulsing, the particles will indicate in white how many triplets of inputs (i/p) were correct before the first mistake, and the other particles will remain pulsing in black. The module will not display the initial direction again, so it is recommended to keep your notes.

5	1	3	6	4	0	2
1	2	6	4	0	5	3
4	0	5	1	3	2	6
3	5	2	0	1	6	4
0	3	4	2	6	1	5
6	4	0	5	2	3	1
2	6	1	3	5	4	0