# Meta-Loop 

## LMI Fun Contest: April 24-29, 2020 Jonah Ostroff

Brief rule summary: (for full rules, see the IB)
Match the room rules, circle rules, and ?-values to the zones.

Country Road: At most one visit per room. Clue $=$ number of cells used, no empty cells are adjacent across a room border. Detour: Use all cells! Clue $=$ number of turns in the room. Haisu: Use all cells! Clue = number of visits to the room. Liar: Use all cells! Clue $\neq$ length of any visit to the room. Maxi: Use all cells! Clue = length of longest visit to the room. Variety: Clue $=$ number of distinct cell contents in the room.

Balance: White balance loop pearl.
Empty: Unused cell (overriding "use all cells" room rules).
Ice: Loop must pass straight through, can cross itself here.
Masyu: Black or white masyu pearl.
Palindrome: In each visit to each room, location of circles along loop is palindromic.
Persistence: Loop makes the same shape in each circle.

Answer Entry: Record the length (in cells) of each visit to the marked rows that the loop makes, from left to right. Ignore vertical segments in Ice Barn crossings. Also, in order A-F, record the rules and ? value for each zone as a 3 -digit number using the digits 1-6 as ordered in the matchmaker grid, separating zones by commas. See example below.

## Example:



## Example key:

A: 1142
B: 122213
Matchmaker: 655,232,363,421,544,116

Oh, wait, I forgot to tell you one thing: there's only one grid.
Draw the loop through the matchmaker grid. As you match up zones, room rules, circle rules, and ?-values, draw circles in the appropriate cells. Those are the circle clues.

The Puzzle


